

**A REPORT OF THE  
SMALL GRAIN VARIETY REVIEW BOARD**



**ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES**

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ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES

August 2017

The Association of Official Seed Certifying Agencies (AOSCA), Small Grain Variety Review Board (SGVRB), reviewed the following varieties on August 8, 2017. The Board recommended the inclusion of these varieties for certification. Seed of these varieties may be certified, providing production meets all standards of the Seed Certifying Agency of the jurisdiction in which the seed is grown.

All variety information, including descriptions, claims, and research data to support any claim, was supplied to the Small Grain Variety Review Board by the applicants. The Small Grain Variety Review Board makes judgments regarding recommendation of varieties for inclusion into certification based on the data supplied. Beyond that, the Small Grain Variety Review Board takes no position on the accuracy or truthfulness of any description or claim made by the applicants.

Further information on current procedures, application forms, and detail regarding the Small Grain Variety Review Board can be obtained from:

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Respectfully submitted,

Rick Novak, Chairman  
Small Grains Variety Review Board

## 2017 AOSCA SMALL GRAIN VARIETY REVIEW BOARD

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# Wheat

## Solano DA900-229 (Exp) Amended – Variant Change

Variety Name Solano  
Experimental Designation(s) DA900-229  
Date SGVRB first recommended this variety 2005  
Date(s) any previous amendments were recommended \_\_\_\_\_  
Date this amendment was submitted June 28, 2017

Solano (Experimental designation DA900-229) is a hard red spring wheat variety developed by Westbred, LLC. Solano originated from the cross DA993-191/Express using a modified pedigree breeding system. Solano has been tested in and is adapted to the irrigated areas of the Sacramento Valley and Delta areas of California. It has acceptable milling quality, good mixing characteristics and good baking quality. The quality is equal to the variety Express.

Solano is a day length insensitive spring wheat. The average height is 89 cm which is 8 cm shorter than Express. Solano has green leaves at the boot stage. The flag leaf is erect, twisted with waxy bloom. The auricles are white. Stems are white, hollow, with pubescence present on the last rachis internode. The spike is awned, lax, and white with an oblong shape. The awns are white and midlong. The spikes are inclined at maturity. The glumes are white, long, mid-wide and have elevated shoulders. The beaks are mid-wide, medium long and acuminate. Solano has long midwide and elliptical seed. The brushes are large, medium long and are not collared. The seed crease is shallow and narrow. The cheeks are rounded and the germ is midsize. Solano most resembles Express but differs in that Solano has elevated glume shoulders while Express has oblique glume shoulders. Solano has green leaves at booting while Express has blue-green leaves.

Solano has a tall variant that is 12 cm to 24 cm taller which occurs at a frequency of up to 0.1%. A white-seed variant occurs at a frequency of up to 0.5%. An awnless variant occurs at a frequency of up to 0.1%.

Solano was tolerant to the prevalent races of stripe rust found in California until 2004 but is now susceptible to at least one of the new races in 2005. Solano is tolerant to *Septoria tritici*. No data has been collected on insect susceptibility. Westbred, LLC will maintain breeder seed by planting spike rows as needed. The certified seed classes will be Foundation, Registered and Certified. Certified seed will be available in the fall of 2006. Certified acreage is not to be published by AOSCA and certifying agencies. Application for Plant Variety Protection will be made in 2006 and the "Certification Option" will not be elected.

Date this application was submitted: Jun 28, 2017

Date recommended by the VRB: Aug 8, 2017



# Wheat

## WB1529

### BZ6W07-436 (Exp)

### Amended – Variant Change

Variety Name WB1529

Experimental Designation(s) BZ6W07-436

Date SGVRB first recommended this variety 2014

Date(s) any previous amendments were recommended       

Date this amendment was submitted June 10, 2017

1. WB1529 is a soft white winter wheat developed by Monsanto Technology, LLC.
  2. WB1529 was selected for yield, plant height, protein content, protein quality, and resistance to stripe rust using the pedigree method.
  3. WB1529 is adapted to the soft white winter wheat growing areas of the Pacific Northwest.
  4. WB1529 was rated resistant to prevalent races of stripe rust in 2012.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common</u>	2. Seasonal Growth Habit:	<u>Winter</u>
3. Coleoptile Color:	<u>White</u>	4. Juvenile Growth Habit:	<u>Prostrate</u>
5. Leaf Color at Boot:	<u>Green</u>	6. Flag Leaf at Boot:	<u>Recurved Twisted Waxy</u>
7. Auricle Color:	<u>White</u>	8. Days to 50% Heading:	<u>171 (Julian)</u>
9. Anther Color:	<u>Yellow</u>	10. Stem Color:	<u>Anthocyanin Absent</u>
11. Plant Height (cm):	<u>87.6</u>	12. Internodes:	<u>Hollow</u>
13. Spike Shape:	<u>Oblong (Strap)</u>	14. Spike Density:	<u>Dense</u>
15. Spike Curvature:	<u>Inclined</u>	16. Awn Type:	<u>Awned</u>
17. Awn Color:	<u>White</u>	18. Glume Color:	<u>White</u>
19. Glume Length:	<u>Medium</u>	20. Shoulder Shape:	<u>Square</u>
21. Shoulder Width:	<u>Medium</u>	22. Beak Shape:	<u>Acuminate</u>
23. Beak Length (S.M.L.VL):	<u>M</u>	24. Glume Pubescence:	<u>Absent</u>
25. Seed Color:	<u>White</u>	26. Seed Shape:	<u>Ovate</u>
27. Cheeks:	<u>Angular</u>	28. Brush Size (S,M,L.):	<u>M</u>
29. Avg 1,000 Kernel Wt (g):	<u>41</u>		

Physiological/biochemical Traits: \_\_\_\_\_

Variants and frequency: A tall variant that is 1 to 2 heads taller than WB1529 can occur at a frequency of up to 0.1%. Red seed may be found at a frequency of up to 60/10,000 (0.6%). A bronze head variant may occur at a frequency of .2% (20/10,000). An awnless variant may occur at a frequency of .2% (20/10,000).

6. Recognized classes of this variety will be breeder, foundation, registered, and certified. Monsanto will maintain the variety by the head-row purification method to produce breeder seed as needed and foundation seed will be produced from breeder or foundation class of seed.
7. Certified seed will be available for planting in the Fall of 2014.
8. Application will be made under the Plant Variety Protection Act and the certification option will not be selected.
9. AOSCA and seed certifying agencies may not publish seed production acreages.

Date this application was submitted: Jun 10, 2017

Date recommended by the VRB: Aug 8, 2017



# Wheat

## WB4462

### HV9W10-0091 (Exp)

### Amended – Variant Change

Variety Name WB4462  
Experimental Designation(s) HV9W10-0091  
Date SGVRB first recommended this variety 2015  
Date(s) any previous amendments were recommended \_\_\_\_\_  
Date this amendment was submitted June 10, 2017

1. WB4462 (HV9W10-0091) is a hard red winter wheat developed by the Monsanto LLC.
2. In early generations of WB4462, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.
3. WB4462 is adapted to the hard winter wheat growing regions of the Central Plains.
4. No claims about disease resistance are made at this time.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common, Hard Red Winter Wheat</u>		
	If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)		
2. Seasonal Growth Habit:	<u>Winter</u>	16. Awn Type:	<u>Awned</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Semi-erect</u>	18. Glume Color:	<u>White</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Long</u>
6. Flag Leaf at Boot:	<u>Erect, Twisted, Waxy</u>	20. Shoulder Shape:	<u>Apiculate</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Medium</u>
8. Days to 50% Heading:	<u>135 (Julian)</u>	22. Beak Shape:	<u>Acuminate</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>Long</u>
10. Anthoncyanin:	<u>Absent</u>	24. Glume Pubescence:	<u>Absent</u>
11. Plant Height (cm):	<u>86.4</u>	25. Seed Color:	<u>Red</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Oval</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks:	<u>Angular</u>
14. Spike Density:	<u>Lax</u>	28. Brush Size (S,M,L.):	<u>Medium</u>
15. Spike Curvature:	<u>Nodding</u>	29. Avg 1,000 Kernel Wt (g):	<u>48.5</u>

#### 30. Physiological/biochemical Traits:

Variants and frequency: A variant that is similar to WB4462 but has white seed occurs at a frequency of up 0.5% (50 per 10,000 seeds). A variant that is similar to WB4462 but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of WB4462 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.
7. Commercial seed of WB4462 will likely be ready for commercial sale by the fall of 2015.
8. Application for a Utility Patent and PVP is anticipated for WB4462, but the option for Title V will not be taken.
9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jun 10, 2017

Date recommended by the VRB: Aug 8, 2017



**Wheat**  
**WB4483**  
**BZ9W09-2212 (Exp)**  
**Amended – Variant Change**

Variety Name WB4483  
 Experimental Designation(s) BZ9W09-2212  
 Date SGVRB first recommended this variety 2015  
 Date(s) any previous amendments were recommended \_\_\_\_\_  
 Date this amendment was submitted June 10, 2017

1. WB4483 (BZ9W09-2212) is a hard red spring wheat developed by the Monsanto LLC.
2. In early generations of WB4483, single spikes were selected based on agronomics, straw strength and disease resistance. Later generations were selected based on yield, quality, and disease resistance.
3. WB4483 is adapted to the hard winter wheat growing regions of Montana and the Pacific Northwest.
4. No claims about disease resistance are made at this time.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common, Hard Red Winter Wheat</u>		
	If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)		
2. Seasonal Growth Habit:	<u>Winter</u>	16. Awn Type:	<u>Awned</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Semi-Erect</u>	18. Glume Color:	<u>White</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Long</u>
6. Flag Leaf at Boot:	<u>Recurved, Twisted, Waxy</u>	20. Shoulder Shape:	<u>Oblique</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Narrow</u>
8. Days to 50% Heading:	<u>163 (Julian)</u>	22. Beak Shape:	<u>Acuminate</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>Long</u>
10. Anthoncyanin:	<u>Absent</u>	24. Glume Pubescence:	<u>Absent</u>
11. Plant Height (cm):	<u>81.3</u>	25. Seed Color:	<u>Red</u>
12. Internodes:	<u>Semi-Solid</u>	26. Seed Shape:	<u>Ovate</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Lax</u>	28. Brush Size (S,M,L.):	<u>Short</u>
15. Spike Curvature:	<u>Nodding</u>	29. Avg 1,000 Kernel Wt (g):	<u>37.5</u>

30. Physiological/biochemical Traits:

Variants and frequency: A variant that is similar to WB4483 but has white seed occurs at a frequency of up to .5% (50 per 10,000 seeds). A variant that is similar to WB4462 but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of WB4483 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.
7. Commercial seed of WB4483 will likely be ready for commercial sale by the fall of 2015.
8. Application for a Utility Patent and PVP is anticipated for WB4483, but the option for Title V will not be taken.
9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jun 10, 2017                      Date recommended by the VRB: Aug 8, 2017





# Wheat

## WB4721

### HV9W10-0129 (Exp)

### Amended – Variant Change

Variety Name WB4721

Experimental Designation(s) HV9W10-0129

Date SGVRB first recommended this variety 2015

Date(s) any previous amendments were recommended     

Date this amendment was submitted June 10, 2017

1. WB4721 (HV9W10-0129) is a hard red winter wheat developed by the Monsanto LLC.
2. In early generations of WB4721, single spikes were selected based on maturity, test weight and vigor. Later generations were selected based on yield, quality, and disease resistance.
3. WB4721 is adapted to the hard winter wheat growing regions of the Central Plains.
4. No claims about disease resistance are made at this time.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common, Hard Red Winter Wheat</u>
If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)	
2. Seasonal Growth Habit:	<u>Winter</u>
3. Coleoptile Color:	<u>Red</u>
4. Juvenile Growth Habit:	<u>Semi-Erect</u>
5. Leaf Color at Boot:	<u>Green</u>
6. Flag Leaf at Boot:	<u>Erect, Twisted, Waxy</u>
7. Auricle Color:	<u>White</u>
8. Days to 50% Heading:	<u>137 (Julian)</u>
9. Anther Color:	<u>Yellow</u>
10. Anthoncyanin:	<u>Absent</u>
11. Plant Height (cm):	<u>83.8</u>
12. Internodes:	<u>Hollow</u>
13. Spike Shape:	<u>Tapering</u>
14. Spike Density:	<u>Middense</u>
15. Spike Curvature:	<u>Inclined</u>
16. Awn Type:	<u>Awned</u>
17. Awn Color:	<u>Brown</u>
18. Glume Color:	<u>Bronze</u>
19. Glume Length:	<u>Medium</u>
20. Shoulder Shape:	<u>Elevated</u>
21. Shoulder Width:	<u>Narrow</u>
22. Beak Shape:	<u>Acuminate</u>
23. Beak Length (S.M.L.VL):	<u>Long</u>
24. Glume Pubescence:	<u>Absent</u>
25. Seed Color:	<u>Red</u>
26. Seed Shape:	<u>Oval</u>
27. Cheeks:	<u>Rounded</u>
28. Brush Size (S,M,L.):	<u>Short</u>
29. Avg 1,000 Kernel Wt (g):	<u>42</u>

#### 30. Physiological/biochemical Traits:

Variants and frequency: A variant that is similar to WB4721 but has white seed occurs at a frequency of up to .2% (20 per 10,000 seeds). A variant that is similar to WB4721 but is 15cm to 20cm taller occurs at a frequency of up to .2% (20/10,000). A white head variant may occur at a frequency of .9% (90/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of WB4721 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.
7. Commercial seed of WB4721 will likely be ready for commercial sale by the fall of 2015.
8. Application for a Utility Patent and PVP is anticipated for WB4721, but the option for Title V will not be taken.
9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Jun 10, 2017

Date recommended by the VRB: Aug 8, 2017



# Wheat

## WB6121

### BZ608-121 (Exp)

#### Amended – Variant Change

Variety Name WB6121

Experimental Designation(s) BZ608-121

Date SGVRB first recommended this variety 2013

Date(s) any previous amendments were recommended \_\_\_\_\_

Date this amendment was submitted June 28, 2017

1. WB6121 is a soft white spring wheat developed by Monsanto Technology, LLC
2. WB6121 was selected for yield, protein content, protein quality, and resistance to stripe rust, using the backcross method.
3. WB6121 was tested under irrigated and high rainfall conditions in Washington, Idaho, and Montana and will be marketed by the WestBred brand as a grain producing variety in those areas.
4. WB6121 is considered Resistant (R) to the current races of stripe rust found in the Pacific Northwest.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common</u>	2. Seasonal Growth Habit:	<u>Spring</u>
3. Coleoptile Color:	<u>White</u>	4. Juvenile Growth Habit:	<u>Erect</u>
5. Leaf Color at Boot:	<u>Green</u>	6. Flag Leaf at Boot:	<u>Recurved, Twisted, Waxy</u>
7. Auricle Color:	<u>White</u>	8. Days to 50% Heading:	<u>190</u>
9. Anther Color:	<u>Yellow</u>	10. Stem Color:	<u>Anthocyanin Absent (White)</u>
11. Plant Height (cm):	<u>84</u>	12. Internodes:	<u>Hollow</u>
13. Spike Shape:	<u>Oblong</u>	14. Spike Density:	<u>Mid-dense</u>
15. Spike Curvature:	<u>Inclined</u>	16. Awn Type:	<u>Awned</u>
17. Awn Color:	<u>White</u>	18. Glume Color:	<u>White/Amber</u>
19. Glume Length:	<u>Medium</u>	20. Shoulder Shape:	<u>Square</u>
21. Shoulder Width:	<u>Medium</u>	22. Beak Shape:	<u>Acuminate</u>
23. Beak Length (S.M.L.VL):	<u>Short</u>	24. Glume Pubescence:	<u>Absent</u>
25. Seed Color:	<u>White</u>	26. Seed Shape:	<u>Ovate</u>
27. Cheeks:	<u>Rounded</u>	28. Brush Size (S,M,L.):	<u>large</u>
29. Avg 1,000 Kernel Wt (g):	<u>35</u>		

Physiological/biochemical Traits: \_\_\_\_\_

Variants and frequency: A red seed variant may occur at a frequency of up to 0.85% (85 seeds per 10,000). Taller plants (1-2 heads) may occur at a frequency of up to .15% (15 plants per 10,000). A bronze or red chaff variant may occur at a frequency of 0.5% (5 plants per 10,000).

6. Recognized classes of this variety will be breeder, foundation, registered, and certified. Monsanto will maintain the variety by the head-row purification and bulk seed methods to produce breeder seed as needed and foundation seed will be produced from breeder or foundation class seed.
7. Certified seed sales are anticipated in the spring of 2014
8. Application will be made under the Plant Variety Protection Act and certification option will not be selected.
9. AOSCA and seed certifying agencies may not publish seed production acreages.

Date this application was submitted: Jun 28, 2017

Date recommended by the VRB: Aug 8, 2017



# Wheat

## WB7390

### DA908-306 (Exp)

#### Amended – Variant Change

Variety Name WB7390

Experimental Designation(s) DA908-306

Date SGVRB first recommended this variety 2014

Date(s) any previous amendments were recommended     

Date this amendment was submitted June 10, 2017

1. WB7390 (Experimental code, DA908-306) is a hard white spring wheat variety developed by WestBred, a Unit of Monsanto.
2. WB7390 was selected for white seed, high yield, plant height, stripe rust resistance prior to F5 in 2008.
3. WB7390 is adapted to wheat production areas of Southern California, San Joaquin valley in California. The primary end use its flour is to make raised loaf bread.
4. WB7390 is resistant to the current field races of stripe rust in California.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common</u>	<u>Hard White Spring Wheat</u>	
2. Seasonal Growth Habit:	<u>Spring</u>	16. Awn Type:	<u>Awned</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color:	<u>White</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Medium</u>
6. Flag Leaf at Boot:	<u>Erect Twisted Waxy</u>	20. Shoulder Shape:	<u>Elevated</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Narrow</u>
8. Days to 50% Heading:	<u>86</u>	22. Beak Shape:	<u>Acute</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length:	<u>Medium</u>
10. Stem Color:	<u>No Anthocyanin</u>	24. Glume Pubescence:	<u>Glabrous</u>
11. Plant Height (cm):	<u>96.5</u>	25. Seed Color:	<u>White</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Elliptical</u>
13. Spike Shape:	<u>Oblong (Strap)</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Lax</u>	28. Brush Size (S,M,L.):	<u>Medium</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g):	<u>34.5</u>

30. Physiological/biochemical Traits: n/a

Variants and frequency: A variant that is similar to WB7390 but has red seed occurs at a frequency of up to 0.50%. A tall variant that is 15cm to 30 cm taller than WB7390 occurs at a frequency of up to .2%. Otherwise, WB7390 is a stable and uniform variety in appearance and performance across several generations (F6-F9) and growing conditions.

6. The certified classes of seed to be recognized are Breeder, Foundation, Registered, and Certified. WestBred, a unit of Monsanto, will produce all foundation seed either from breeder seed or foundation class seed. Production of registered and certified seed will be by license to associate seed companies. A royalty fee will be collected on all registered and certified seed sales.
7. Certified seed will be offered for sale in the Fall 2014.
8. Plant Variety Protection will be applied for and the “Certification Option” was not selected.
9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies

Date this application was submitted: Jun 10, 2017

Date recommended by the VRB: Aug 8, 2017



**Wheat**  
**WB7417**  
**BZ9S09-0687W (Exp)**  
**Amended – Variant Change**

Variety Name WB7417

Experimental Designation(s) BZ9S09-0687W

Date SGVRB first recommended this variety 2015

Date(s) any previous amendments were recommended    

Date this amendment was submitted June 10, 2017

1. WB7417 (BZ9S09-0687W) is a hard white spring wheat developed by the Monsanto LLC.
2. In early generations of WB7417, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.
3. WB7417 is adapted to the hard spring wheat growing regions of the Pacific Northwest, including parts of Washington, Oregon, Idaho, and Montana.
4. Preliminary data indicates that WB7417 may be moderately resistant Stripe Rust.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common, Hard White Spring Wheat</u>		
	If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)		
2. Seasonal Growth Habit:	<u>Spring</u>	16. Awn Type:	<u>Awned</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Semi-Erect</u>	18. Glume Color:	<u>Tan</u>
5. Leaf Color at Boot:	<u>Blue-Green</u>	19. Glume Length:	<u>Long</u>
6. Flag Leaf at Boot:	<u>Recurved, Twisted, Waxy</u>	20. Shoulder Shape:	<u>Apiculate</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Wide</u>
8. Days to 50% Heading:	<u>172 (Julian)</u>	22. Beak Shape:	<u>Acuminate</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>Long</u>
10. Anthoncyanin:	<u>Absent</u>	24. Glume Pubescence:	<u>Absent</u>
11. Plant Height (cm):	<u>88.9</u>	25. Seed Color:	<u>White</u>
12. Internodes:	<u>Semi-Solid</u>	26. Seed Shape:	<u>Ovate</u>
13. Spike Shape:	<u>Oblong (Strap)</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Lax</u>	28. Brush Size (S,M,L.):	<u>Small</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g):	<u>46</u>

30. Physiological/biochemical Traits:

Variants and frequency: A variant similar to WB7417 (BZ9S09-0687W) but is 10-20 cm taller occurs at a frequency of .2% (20 plants per 10,000). A red seed variant may occur at a frequency of up to 0.50% (50 seeds per 10,000). An awnless variant may occur at a frequency of .01% (1 plant per 10,000). A bronze head variant may occur at a frequency of up to .1% (10/10,000). Otherwise, this variety has been uniform and stable in appearance and performance across several generations (F5 –F10) and environments.

6. Recognized classes of WB7417 are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.
7. Commercial seed of WB7417 will likely be ready for commercial sale by the spring of 2015.
8. Application for a Utility Patent and PVP is anticipated for WB7417.
9. Application for Plant Variety Protections will be made and the Title V option will not be taken.

Date this application was submitted: Jun 10, 2017

Date recommended by the VRB: Aug 8, 2017



# Wheat

## WB9112

### SJ909-368 (Exp)

#### Amended – Variant Change

Variety Name WB9112

Experimental Designation(s) SJ909-368

Date SGVRB first recommended this variety 2013

Date(s) any previous amendments were recommended     

Date this amendment was submitted June 28, 2017

1. WB9112 is a hard red spring wheat developed by Monsanto Technology, LLC.
2. WB9112 was selected based on it's morphological, agronomic and quality traits that are similar to variety "Joaquin".
3. Monsanto tested and intends to market this variety in the wheat growing areas of the San Joaquin Valley in California as a WestBred branded variety. The primary use will be for flour to make raised loaf bread.
4. WB9112 is resistant to the current field races of stripe rust in California. It is susceptible to Septoria tritici.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common</u>	2. Seasonal Growth Habit:	<u>Spring</u>
3. Coleoptile Color:	<u>White</u>	4. Juvenile Growth Habit:	<u>Erect</u>
5. Leaf Color at Boot:	<u>Green</u>	6. Flag Leaf at Boot:	<u>Erect, Twisted, Waxy</u>
7. Auricle Color:	<u>Purple</u>	8. Days to 50% Heading:	<u>83</u>
9. Anther Color:	<u>Yellow</u>	10. Stem Color:	<u>White</u>
11. Plant Height (cm):	<u>93</u>	12. Internodes:	<u>Hollow</u>
13. Spike Shape:	<u>Oblong</u>	14. Spike Density:	<u>Lax</u>
15. Spike Curvature:	<u>Inclined</u>	16. Awn Type:	<u>Awned</u>
17. Awn Color:	<u>White</u>	18. Glume Color:	<u>White</u>
19. Glume Length:	<u>Long</u>	20. Shoulder Shape:	<u>Elevated</u>
21. Shoulder Width:	<u>Narrow</u>	22. Beak Shape:	<u>Acuminate</u>
23. Beak Length (S.M.L.VL):	<u>M</u>	24. Glume Pubescence:	<u>Absent</u>
25. Seed Color	<u>Red</u>	26. Seed Shape:	<u>Elliptical</u>
27. Cheeks:	<u>Rounded</u>	28. Brush Size (S,M,L.):	<u>M</u>
29. Avg 1,000 Kernel Wt (g):	<u>40</u>		

Physiological/biochemical Traits: \_\_\_\_\_

Variants and frequency: WB9112 has been observed for four generations of reproduction and increase and is table and uniform. WB9112 has a taller variant that is 12 to 30 cm taller that occurs at a frequency of up to .2%. A white seed variant occurs at a frequency of up to 0.75%. An awnless variant may occur at a frequency of 0.1% and a bronze chaff variant may occur at a frequency of 0.1%. The variants are otherwise identical in all other characteristics as described in the Objective descriptions.

6. Remnant breeder seed or planting spike rows of breeder seed will be utilized to reproduce the variety as needed. If necessary, 300 heads will be selected from the breeder seed increase and grown under irrigation by Monsanto to renew the breeder seed and maintain purity. Seed classes to be recognized include Foundation, Registered, and Certified.
7. Certified seed sales are anticipated in the fall of 2013.
8. Application will be made under the Plant Variety Protection Act and certification option will not be selected. Patent protection will be applied for with the US Patent and Trade mark Office
9. AOSCA and seed certifying agencies may not publish seed production acreages.

Date this application was submitted: Jun 28, 2017

Date recommended by the VRB: Aug 8, 2017



**Wheat**  
**WB9229**  
**SJ907-229 (Exp)**  
**Amended – Variant Change**

Variety Name WB9229  
Experimental Designation(s) SJ907-229  
Date SGVRB first recommended this variety 2012  
Date(s) any previous amendments were recommended       
Date this amendment was submitted June 28, 2017

1. WB9229 is a hard red spring wheat bred and developed by WestBred, a unit of Monsanto Company.
2. WB9229 was selected for resistance to stripe rust and high protein using a modified bulk breeding method.
3. WB9229 is adapted to the wheat growing areas of the Central Valleys of California. The primary use will be for flour to make raised loaf bread.
4. WB9229 is resistant to the current field races of stripe rust in California.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

- |   |  |
|---|--|
| 1. <u>Kind</u> : Common Hard Red        | 2. <u>Seasonal growth habit</u> : Spring           |
| 3. <u>Coleoptile color</u> : White      | 4. <u>Juvenile growth habit</u> : Erect            |
| 5. <u>Leaf color at boot</u> : Green    | 6. <u>Flag leaf at boot</u> : Erect, Twisted, Waxy |
| 7. <u>Auricle color</u> : White         | 8. <u>Days to 50% heading</u> : 88                 |
| 9. <u>Anther color</u> : Yellow         | 10. <u>Stem color</u> : White                      |
| 11. <u>Plant height (cm)</u> : 92       | 12. <u>Internodes</u> : Hollow                     |
| 13. <u>Spike shape</u> : Tapering       | 14. <u>Spike density</u> : Lax                     |
| 15. <u>Spike curvature</u> : Inclined   | 16. <u>Awn type</u> : Awned                        |
| 17. <u>Awn color</u> : White            | 18. <u>Glume color</u> : White/Amber               |
| 19. <u>Glume length</u> : Long          | 20. <u>Shoulder shape</u> : Oblique                |
| 21. <u>Shoulder width</u> : Wide        | 22. <u>Beak shape</u> : Acuminate                  |
| 23. <u>Beak length (S, M, L, VL):</u> M | 24. <u>Glume pubescence</u> : Present              |
| 25. <u>Seed color</u> : Red             | 26. <u>Seed shape</u> : Elliptical                 |
| 27. <u>Cheeks</u> : Rounded             | 28. <u>Brush size (S,M, L)</u> : L                 |
| 29. <u>Avg 1,000 kernel wt (g)</u> : 39 | 30. <u>Phenol reaction</u> : Dark Brown            |

Physiological/biochemical traits:

Variants and frequency: WB9229 has been observed for three generations of reproduction and increase and is stable and uniform. WB9229 has a taller variant that is 12-30 cm taller that occurs at a frequency of up to .2%. A white seed variant occurs at a frequency of up to 0.5%. A red or bronze chaff variant may occur at a frequency of 0.5%. The variants are otherwise identical in all other characteristics as described in the Objective descriptions.

6. The certified classes of seed to be recognized are Breeder, Foundation, Registered and Certified. WestBred, a unit of Monsanto Company, will maintain the breeder seed by planting spike rows or bulk seed as needed. Monsanto Company will produce all foundation seed either from breeder seed or foundation class seed. Production of registered and certified seed will be by license to associate seed companies. A royalty fee will be collected on all registered and certified seed sales.
7. Certified seed will first be offered for sale in the fall of 2012.
8. Plant Variety Protection will be applied for and the ‘Certification Option’ will not be elected.
9. Certified acreage is not to be published by AOSCA and certifying agencies

Date this application was submitted: Jun 28, 2017

Date recommended by the VRB: Aug 8, 2017



**Wheat**  
**WB9479**  
**FA9S10-0038R (Exp)**  
**Amended – Variant Change**

Variety Name WB9479  
 Experimental Designation(s) FA9S10-0038R  
 Date SGVRB first recommended this variety Apr 25, 2017  
 Date(s) any previous amendments were recommended \_\_\_\_\_  
 Date this amendment was submitted August 1, 2017

1. FA9S10-0038R is a Hard Red Spring wheat developed by the Monsanto LLC.
2. In early generations of FA9S10-0038R, single spikes were selected based on agronomics and disease resistance. Later generations were selected based on yield, quality, and disease resistance.
3. FA9S10-0038R is adapted to the Hard Red Spring wheat growing regions of Northern Plains.
4. No claims about disease resistance are made at this time.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common, Hard Red Spring Wheat</u>		
	If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)		
2. Seasonal Growth Habit:	<u>Spring</u>	16. Awn Type:	<u>Awne</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Semi-erect</u>	18. Glume Color:	<u>White/Amber</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>No data</u>
6. Flag Leaf at Boot:	<u>Erect, Twisted, No Wax</u>	20. Shoulder Shape:	<u>Elevated</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Narrow</u>
8. Day(s) to 50% Heading:	<u>181</u>	22. Beak Shape:	<u>Acuminate</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>L</u>
10. Anthoncyanin:	<u>Absent</u>	24. Glume Pubescence:	<u>Absent (Glabrous)</u>
11. Plant Height (cm):	<u>71.12</u>	25. Seed Color:	<u>Red</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Oval</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks:	<u>Angular</u>
14. Spike Density:	<u>Lax</u>	28. Brush Size (S,M,L.):	<u>S</u>
15. Spike Curvature:	<u>Erect</u>	29. Avg 1,000 Kernel Wt (g):	<u>31</u>

30. Physiological/biochemical Traits:

Variants and frequency: A variant that is similar to FA9S10-0038R but has white seed occurs at a frequency of up to 0.50% (50 out of 10,000 seeds). A variant that is similar to FA9S10-0038R but is 15cm to 20cm taller occurs at a frequency of up to 0.50% (50/10,000). A bronze head variant may occur at a frequency of .1% (10/10,000). An awnless variant may occur at a frequency of .1% (10/10,000).

6. Recognized classes of FA9S10-0038R are breeder, foundation, registered, and certified. Monsanto Company will maintain the variety by the head-row purification method to produce breeder seed as needed and all foundation seed. Royalty fees and/ or licensing agreements are anticipated.
7. Commercial seed of FA9S10-0038R will likely be ready for commercial sale by the spring of 2018.
8. Application for a Utility Patent and PVP is anticipated for FA9S10-0038R and the option for Title V will not be taken.
9. Certified seed production acreage is not to be published by AOSCA and individual certifying agencies.

Date this application was submitted: Aug 1, 2017                      Date recommended by the VRB: Aug 8, 2017



# Wheat

## WB9668

### BZ908-552 (Exp)

#### Amended – Variant Change

Variety Name WB9668  
Experimental Designation(s) BZ908-552  
Date SGVRB first recommended this variety 2014  
Date(s) any previous amendments were recommended \_\_\_\_\_  
Date this amendment was submitted June 10, 2017

1. WB9668 is a hard red spring wheat developed by Monsanto Technology, LLC.
  2. WB9668 was selected for yield, plant height, protein content, protein quality, and resistance to stripe rust using the pedigree method.
  3. WB9668 is adapted to the hard red spring wheat growing areas of the Pacific Northwest.
  4. WB9668 was rated resistant to prevalent races of stripe rust found in the Pacific Northwest in 2012.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common</u>	2. Seasonal Growth Habit:	<u>Spring</u>
3. Coleoptile Color:	<u>White</u>	4. Juvenile Growth Habit:	<u>Erect</u>
5. Leaf Color at Boot:	<u>Blue-Green</u>	6. Flag Leaf at Boot:	<u>Waxy Bloom, Erect, Twisted</u>
7. Auricle Color:	<u>White</u>	8. Days to 50% Heading:	<u>185</u>
9. Anther Color:	<u>Yellow</u>	10. Stem Color:	<u>Anthocyanin Absent</u>
11. Plant Height (cm):	<u>78.2</u>	12. Internodes:	<u>Hollow</u>
13. Spike Shape:	<u>Oblong (Strap)</u>	14. Spike Density:	<u>Mid Dense</u>
15. Spike Curvature:	<u>Inclined</u>	16. Awn Type:	<u>Awned</u>
17. Awn Color:	<u>White</u>	18. Glume Color:	<u>White</u>
19. Glume Length:	<u>Long</u>	20. Shoulder Shape:	<u>Oblique</u>
21. Shoulder Width:	<u>Narrow</u>	22. Beak Shape:	<u>Acuminate</u>
23. Beak Length (S.M.L.VL):	<u>S</u>	24. Glume Pubescence:	<u>Absent</u>
25. Seed Color:	<u>Red</u>	26. Seed Shape:	<u>Ovate</u>
27. Cheeks:	<u>Rounded</u>	28. Brush Size (S,M,L.):	<u>L</u>
29. Avg 1,000 Kernel Wt (g):	<u>39g</u>		

Physiological/biochemical Traits: \_\_\_\_\_

Variants and frequency: A tall variant that is one to two heads taller than WB9668 can occur at a frequency of up to 0.2%. A variant that is similar to WB9668 but has white seed may occur at a frequency of up to 0.6%. A bronze head variant may occur at a frequency of .2% (20/10,000). An awnless variant may occur at a frequency of .2% (20/10,000).

6. Recognized classes of this variety will be breeder, foundation, registered, and certified. Monsanto will maintain the variety by the head-row purification method to produce breeder seed as needed and foundation seed will be produced from breeder or foundation class of seed.
7. Certified seed will be available for planting in the spring of 2015
8. Application will be made under the Plant Variety Protection Act and certification option will not be selected.
9. AOSCA and seed certifying agencies may not publish seed production acreages.

Date this application was submitted: Jun 10, 2017

Date recommended by the VRB: Aug 8, 2017





**Wheat**  
**WB-Patron**  
**YU908-017 (Exp)**  
**Amended – Variant Change**

Variety Name WB-Patron  
Experimental Designation(s) YU908-017  
Date SGVRB first recommended this variety 2012  
Date(s) any previous amendments were recommended       
Date this amendment was submitted June 28, 2017

1. WB-Patron is a hard red spring wheat bred and developed by WestBred, a unit of Monsanto Company.
2. WB-PATRON was selected for stripe rust resistance, high forage yield, earliness relative to PR 1404, high test weight, high grain yield, forage quality and resistance to lodging. A modified bulk breeding method was used.
3. WB-Patron is adapted to the forage wheat growing areas of California. The primary use for WB-Patron will be for whole plant forage.
4. WB-Patron is resistant to the current field races of stripe rust in California.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

- |   |  |
|---|--|
| 1. <u>Kind</u> : Common Hard Red              | 2. <u>Seasonal growth habit</u> : Spring           |
| 3. <u>Coleoptile color</u> : White            | 4. <u>Juvenile growth habit</u> : Erect            |
| 5. <u>Leaf color at boot</u> : Green          | 6. <u>Flag leaf at boot</u> : Erect, Twisted, Waxy |
| 7. <u>Auricle color</u> : White               | 8. <u>Days to 50% heading</u> : 88                 |
| 9. <u>Anther color</u> : Yellow               | 10. <u>Stem color</u> : White                      |
| 11. <u>Plant height (cm)</u> : 99             | 12. <u>Internodes</u> : Hollow                     |
| 13. <u>Spike shape</u> : Tapering             | 14. <u>Spike density</u> : Lax                     |
| 15. <u>Spike curvature</u> : Inclined         | 16. <u>Awn type</u> : Awnletted                    |
| 17. <u>Awn color</u> : White                  | 18. <u>Glume color</u> : White/Amber               |
| 19. <u>Glume length</u> : Long                | 20. <u>Shoulder shape</u> : Rounded                |
| 21. <u>Shoulder width</u> : Narrow            | 22. <u>Beak shape</u> : Acuminate                  |
| 23. <u>Beak length (S, M, L, VL)</u> : L      | 24. <u>Glume pubescence</u> : Present              |
| 25. <u>Seed color</u> : Red                   | 26. <u>Seed shape</u> : Elliptical                 |
| 27. <u>Cheeks</u> : Rounded                   | 28. <u>Brush size (S,M, L)</u> : L                 |
| 29. <u>Avg 1,000 kernel wt (g)</u> : 40       | 30. <u>Phenol reaction</u> : Dark                  |
| <u>Physiological/biochemical traits</u> :<br> |  |

Variants and frequency: WB-Patron has been observed for four generations (F5-F8) of reproduction and seed increase and is stable and uniform. WB-Patron has a white seed variant that occurs at a frequency of 0.5%. A taller variant that is 12-30 cm taller occurs at a frequency of up to 0.2%. An awned variant occurs at a frequency of up to 0.2%. The variants are otherwise identical to the variety in all other characteristics.

6. The certified classes of seed to be recognized are Breeder, Foundation, Registered and Certified. WestBred, a unit of Monsanto Company, will maintain the breeder seed by planting spike rows as needed. Monsanto Company will produce all foundation seed either from breeder seed or foundation class seed. Production of registered and certified seed will be by license to associate seed companies. A royalty fee will be collected on all registered and certified seed sales.
7. Certified seed will first be offered for sale in the fall of 2011.
8. Plant Variety Protection has been applied for and the “Certification Option” was not selected.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jun 28, 2017

Date recommended by the VRB: Aug 8, 2017



# Wheat

## WINTERHAWK HV9W02-846R (Exp) Amended – Variant Change

Variety Name WINTERHAWK  
Experimental Designation(s) HV9W02-846R  
Date SGVRB first recommended this variety 2007  
Date(s) any previous amendments were recommended       
Date this amendment was submitted June 28, 2017

WINTERHAWK is a common, hard red winter wheat derived from the cross 474S10-1/X87807//HBK736-3, made by Kansas State University in Manhattan, KS in 1995. It was advanced by modified bulk until 2000. Goertzen Seed Research made individual head selections from an F6 population, which was advanced by pedigree methods during the testing and purification stages. Western Plant Breeders merged their operations with Goertzen Seed Research to form WestBred LLC, which owns the rights to the variety.

WINTERHAWK is adapted to the southern Great Plains, primarily east of U.S. 281, (Tables 2-4) for the purpose of grain production.

WINTERHAWK is a common hard red winter wheat with a white coleoptile and semi-erect juvenile growth habit. It has a yellow-green leaf color at boot stage. The flag leaf is erect, not twisted, and has waxy bloom present. The auricle color is white. WINTERHAWK is medium maturity, averaging 4 days earlier heading than Jagalene. The stem color is white. WINTERHAWK is medium tall, averaging 10 cm taller than Jagalene. The internodes are hollow, and the anthers are yellow. The spike is tapering, mid-dense, and inclined at maturity. WINTERHAWK has mid-long awns that are tan at maturity. The glumes are glabrous, white/amber at maturity, mid-long, with slightly elevated shoulders that quickly fall off to essentially oblique. The beak is acuminate and medium length. The seed is red, oval, with a large brush. The TKW is heavier than Jagalene. The seeds are most similar in appearance to Overley. The phenol reaction is light brown. Variants that may occur include taller (5-10 cm) plants at a rate of 0.1%, and bronze/brown chaffed plants at a rate of 0.01%. A white seed variant may occur at a frequency of 0.50%.

WINTERHAWK is susceptible to Hessian fly, greenbug, and Russian wheat aphid (Table 5). It is moderately susceptible to powdery mildew and resistant to wheat soil borne mosaic virus and wheat spindle streak mosaic virus. WINTERHAWK is moderately susceptible to stem rust in greenhouse seedling tests, although stem rust has not been observed in the field. It is resistant to leaf rust and stripe rust. It is moderately resistant to wheat streak mosaic, and moderately susceptible to aluminum toxicity under low soil pH conditions. The coleoptile length is medium. The grazing potential is very good. WINTERHAWK has good straw strength and very good test weight. The milling and baking quality of WINTERHAWK is acceptable (Table 6).

Remnant breeder seed will be utilized to reproduce the variety as needed. If necessary, 300 heads will be selected from the breeder seed increase and grown under irrigation in Colorado to renew the breeder seed and maintain purity. Foundation to Foundation increases will also be used for parent seed increase. Seed classes to be recognized include Foundation, Registered, and Certified. We anticipate certified seed sales in fall 2008. Plant Variety Protection will be applied for. The certification option will not be elected. AOSCA and seed certifying agencies may publish acreages.

Date this application was submitted: Jun 28, 2017

Date recommended by the VRB: Aug 8, 2017



# Wheat

## SJ808-003 (Exp)

1. SJ808-003 is a spring durum wheat variety developed by Second Nature Research LLC.
2. SJ808-003 was selected for high yield, high test weight, and good pasta making quality. The breeding method used was a selected spike bulk modified pedigree.
3. SJ808-003 is adapted to the irrigated durum growing areas of the Southwest United States.
4. SJ808-003 is resistant to current races of stripe rust in California.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	Durum, Spring, Wheat		
If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)			
2. Seasonal Growth Habit:	Spring	16. Awn Type:	Awned
3. Coleoptile Color:	White	17. Awn Color:	Black
4. Juvenile Growth Habit:	Erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Blue-Green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Erect, Twisted, Wax Present	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	89	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Present
11. Plant Height (cm):	88.9	25. Seed Color:	Amber
12. Internodes:	Hollow	26. Seed Shape:	Elliptical
13. Spike Shape:	Oblong	27. Cheeks:	Rounded
14. Spike Density:	Dense	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	64.5

### 30. Physiological/biochemical Traits:

Variants and frequency: SJ808-003 has been observed for four generations of reproduction and increases and is stable and uniform. SJ808-003 has a taller variant that is 12-30cm taller that occurs at a frequency of up to 0.2%. A white awn variant occurs at a frequency of up to 0.2%. The variants are otherwise identical in all other characteristics described.

6. The certified classes of seed to be recognized of SJ808-003 are Breeder, Foundation, Registered and Certified. Second Nature Research LLC, will maintain the breeders seed by planting spike rows as needed. SJ 808-003 will have a royalty fee and licensing agreement required.
7. Certified seed of SJ808-003 will likely be offered for planting in the fall of 2017.
8. Application for Plant Variety Protection will be applied for in 2017.
9. Certified acreage is not to be published by AOSCA or individual certifying agencies.

Date this application was submitted: Jul 5, 2017

Date recommended by the VRB: Aug 25, 2017



# Wheat

## YU809-068 (Exp)

1. YU809-068 is a spring durum wheat variety developed by Second Nature Research LLC.
2. YU809-068 was selected for high yield, lodging resistance, low cadmium accumulation and good pasta making quality. The breeding method used was a selected spike bulk modified pedigree.
3. YU809-068 is adapted to the irrigated durum growing areas of the Southwest United States.
4. YU809-068 is moderately resistant to leaf rust and stripe rust which have a low occurrence in its area of intended use.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	Durum, Spring, Wheat		
	If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)		
2. Seasonal Growth Habit:	Spring	16. Awn Type:	Awned
3. Coleoptile Color:	White	17. Awn Color:	Black
4. Juvenile Growth Habit:	Erect	18. Glume Color:	White/Amber
5. Leaf Color at Boot:	Green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Erect, Twisted, Wax Present	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	93	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthocyanin:	Absent	24. Glume Pubescence:	Present
11. Plant Height (cm):	81.25	25. Seed Color:	Amber
12. Internodes:	Semi-solid	26. Seed Shape:	Elliptical
13. Spike Shape:	Oblong	27. Cheeks:	Rounded
14. Spike Density:	Dense	28. Brush Size (S,M,L):	Short
15. Spike Curvature:	Erect	29. Avg 1,000 Kernel Wt (g):	56

30. Physiological/biochemical Traits: Low Cadmium

Variants and frequency: YU809-068 has been observed for three generations of reproduction and increases and is stable and uniform. YU809-068 has a taller variant that is 12-30cm taller that occurs at a frequency of up to 0.2%. A white awn variant occurs at a frequency of up to 0.2%. The variants are otherwise identical in all other characteristics described.

6. The certified classes of seed to be recognized of YU809-068 are Breeder, Foundation, Registered and Certified. Second Nature Research LLC, will maintain the breeder seed by planting spike rows as needed. YU809-068 will have a royalty fee and licensing agreement required.
7. Certified Seed of YU809-068 will likely be offered for planting in the fall of 2017.
8. Application for Plant Variety Protection will be applied for in 2017.
9. Certified acreage is not to be published by AOSCA or individual certifying agencies.

Date this application was submitted: Jul 5, 2017

Date recommended by the VRB: Aug 25, 2017



# Wheat

## Impact 03PN087-15 (Exp)

1. Impact is a soft white winter wheat developed by Syngenta Participations AG.
2. Impact was selected for maturity, plant height, uniformity, appearance, kernel color and soundness, disease reaction and satisfactory preliminary quality screen.
3. Impact is primarily adapted to intermediate rainfall production areas of Washington, and should also perform well in higher moisture areas.
4. Impact has shown above average adult plant resistance to current races of Stripe Rust present in the testing period.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	Common, Soft White Winter Wheat		
	If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)		
2. Seasonal Growth Habit:	Winter	16. Awn Type:	Awned
3. Coleoptile Color:	White	17. Awn Color:	White
4. Juvenile Growth Habit:	Erect	18. Glume Color:	White
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Recurved, Twisted, Wax Present	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	174	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Long
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Present
11. Plant Height (cm):	100	25. Seed Color:	White
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	48

### 30. Physiological/biochemical Traits:

Variants and frequency: Less than 0.2% of plants were rogued from the Breeder Seed increase. Ninety percent of the variant plants were taller (3 to 10 cm). Ten percent of the variants were awnless as opposed to the predominant awned typed. Up to 1% variant plants may be encountered in subsequent generations. Up to 0.5% red seed may be encountered in all classes of certified production.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row/progeny method to produce breeder seed as needed. Royalty fees are anticipated.
7. Certified seed will likely be available Fall of 2017
8. Impact may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jun 23, 2017

Date recommended by the VRB: Aug 29, 2017



# Wheat

## SY Gunsight

### 06PN3015-08 (Exp)

1. SY Gunsight is a hard red spring common wheat bred and developed by Syngenta Participations AG.
  2. SY Gunsight was selected for height, uniformity, agronomics and disease resistance.
  3. SY Gunsight was tested in the spring wheat growing areas (12 to 20 inch moisture zones and irrigated) of the Pacific Northwest (PNW) and was determined to be adapted to this area.
  4. SY Gunsight has shown a low level reaction (Moderate Resistance) to the current strains of stripe rust in the PNW. In Davis California with heavy infection and favorable environmental condition for stripe rust, Gunsight can show a moderately susceptible reaction.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common, Hard Red Spring Wheat</u>		
	If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)		
2. Seasonal Growth Habit:	<u>Spring</u>	16. Awn Type:	<u>Awned</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color:	<u>White</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Medium</u>
6. Flag Leaf at Boot:	<u>Recurved, Twisted, Wax Present</u>	20. Shoulder Shape:	<u>Elevated</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Narrow</u>
8. Days to 50% Heading:	<u>161</u>	22. Beak Shape:	<u>Acuminate</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>Long</u>
10. Anthoncyanin:	<u>Absent</u>	24. Glume Pubescence:	<u>Absent</u>
11. Plant Height (cm):	<u>78 cm</u>	25. Seed Color:	<u>Red</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Ovate</u>
13. Spike Shape:	<u>Strap</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Lax</u>	28. Brush Size (S,M,L.):	<u>Medium</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g):	<u>37.0g</u>

#### 30. Physiological/biochemical Traits:

Variants and frequency: Less than 0.04% of the plants were rogued from the Breeder seed increases. The majority of the variant plants were taller height wheat plants (3 to 6cm). The white seeded variant of approximately 0.3% has also been identified in the Progeny seed production. Up to 1.0% variant plants may be encountered in subsequent generations, white seed variant being up to 35 white seeds per pound.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row/progeny method to produce breeder seed as needed. Royalty fees are anticipated.
7. Certified seed will likely be available for planting in the spring of 2018.
8. Plant Variety Protection is anticipated in 2017 and SY Gunsight may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jun 23, 2017

Date recommended by the VRB: Aug 30, 2017



# Wheat

## 08S0303-16 (Exp)

1. 08S0303-16 is a hard red spring wheat bred and developed by Syngenta Participations AG.
2. This line was developed through a pedigree system using single seed descent for the F3 and F4 generations. The primary selection criteria were short height, strong straw strength, early to medium maturity, good overall disease resistance, high yield and moderate to high protein.
3. 08S0303-16 appears to be broadly adapted to the spring wheat growing areas of the Northern Plains and was selected, screened and yield tested at Syngenta research sites across the Northern Plains in its development from 2009 through 2016.
4. 08S0303-16 is moderately resistant to Fusarium head blight, stem rust and leaf rust.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	Common, Hard Red Spring Wheat		
	If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)		
2. Seasonal Growth Habit:	Spring	16. Awn Type:	Awned
3. Coleoptile Color:	White	17. Awn Color:	White
4. Juvenile Growth Habit:	Erect	18. Glume Color:	White
5. Leaf Color at Boot:	Green	19. Glume Length:	Medium
6. Flag Leaf at Boot:	Recurved, Twisted, Wax Absent	20. Shoulder Shape:	Elevated
7. Auricle Color:	White	21. Shoulder Width:	Narrow
8. Day(s) to 50% Heading:	57.5	22. Beak Shape:	Acuminate
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Medium
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	77	25. Seed Color:	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Lax	28. Brush Size (S,M,L.):	Medium
15. Spike Curvature:	Inclined	29. Avg 1,000 Kernel Wt (g):	32

### 30. Physiological/biochemical Traits:

Variants and frequency: Variant plants are taller in height by 8 to 15 cm. Up to 1% taller variant plants may be encountered in subsequent generations.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row/progeny method to produce breeder seed as needed. Royalty fees are anticipated.
7. Certified seed will likely be available in 2018.
8. Plant Variety Protection is anticipated in 2018 and 08S0303-16 may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jun 23, 2017

Date recommended by the VRB: Aug 29, 2017



# Wheat

## AP503 CL2 CLO 3040-5-2 (Exp) Amended – Variant Change

Variety Name AP503 CL2  
Experimental Designation(s) CLO 3040-5-2  
Date SGVRB first recommended this variety Feb, 2008  
Date(s) any previous amendments were recommended       
Date this amendment was submitted April 7, 2017

AP503 CL2 (CLO 3040-5-2) is a hard red winter wheat bred and developed by Syngenta Seeds, Inc and its legacy companies under the AgriPro Brand. It was derived from the cross between iW98-362A1 (Als3-653) / AP502 CL (Als1-653). The purpose of the cross was to combine two Clearfield resistance genes, Als1 & Als3 into a common genetic background. CL03040-5-2 was grown as an F1 in the summer of 2003 in Junction City, KS (JCKS). F2 seedlings were sprayed with 18oz Beyond in the fall/winter 2003-2004 and resistant plants grown to seed. F3 seedlings were sprayed with 18oz in the spring of 2004 and resistant plants grown for seed. F4 seedlings were sprayed with 18oz Beyond in the late summer 2004. Resistant seedlings were potted and grown to seed during the winter in Berthoud, CO. F5 seed was harvested in February 2005 and planted in the field as F5 plant plots in March 2005 near Berthoud, CO. In July 2005 F5 plots were selected based upon vigor, phenotype equal to Jagalene and stripe rust tolerance. 245 individual plant plots were selected. F6 seed from 90 selections were planted in replicated yield trials at Salina, Goodland and JCKS in the fall 2005. One of these selections was designated CL03040-5-2 and tested regionally in 2007. AP503 CL2 is intended for grain production. AP503 CL2 contains patented traits and will be managed under a Stewardship Agreement.

AP503 CL2 is semidwarf in plant height and has white chaff at maturity. It has medium maturity and good straw strength. AP503 CL2 is resistant to Stem Rust, and Soil Borne Wheat Mosaic Virus. It contains Als-1(653) and Als-3(653) genes conferring tolerance to the BASF herbicide 'Beyond'. AP503 CL2 is adapted to the Great Plains states of Colorado, South Dakota, Nebraska, and Kansas. AP503 CL2 is most similar to the variety 'Jagalene', which is one of the parents in the cross.

Juvenile growth habit is semi-erect. Auricle anthocyanin and auricle hairs are present. Plant color at boot stage is blue green. Anther color is yellow. Flag leaf at boot stage is erect and twisted. Head shape is tapering and awned. Glume shoulder shape is oblique with an acuminate beak. Chaff color is white at maturity. Seed shape is ovate. Brush hairs on the seed are medium in length and occupy a medium area of the seed tip. Seed depth is shallow and width is narrow. Seed cheeks are rounded.

Purity of AP503 CL2 has been established using a progeny purification. Progeny plots from single plants were planted on an isolated block in Berthoud Colorado. These progeny are compared to the morphological characteristics for the variety and any variant progeny are discarded. The selected progeny plots are then bulked to produce Breeders seed.

AP503 CL2 has been uniform and stable since 2006. Less than 0.8% of the plants were rogued from the Breeder seed increase in 2007. Approximately 90% of the rogued variant plants were taller height wheat plants (8 to 15 cm), 5% were bronze chaffed and 5% of the rogued plants were awnless. Up to 1% variant plants may be encountered in subsequent generations. Up to 1.8% white seed variant may be encountered.

Syngenta maintains Breeders seed stock and certified classes of Foundation, Registered and Certified. Foundation and Registered seed stocks of AP503 CL2 were planted in the Fall of 2007 with seed sales anticipated in the Fall of 2008. Certified acreage is not to be published by AOSCA and certifying agencies. Plant Variety Protection is anticipated in 2008 and AP503 CL2 may only be sold as a class of certified seed.

Date this application was submitted: Apr 7, 2017

Date recommended by the VRB: Aug 8, 2017





**Wheat**  
**Jackpot**  
**AP04T8211 (Exp)**  
**Amended – Variant Change**

Variety Name Jackpot  
Experimental Designation(s) AP04T8211  
Date SGVRB first recommended this variety March, 2009  
Date(s) any previous amendments were recommended       
Date this amendment was submitted April 7, 2017

1. Jackpot is a hard red winter wheat bred and developed by Syngenta Seeds, Inc.
2. Jackpot is the result of a cross made in 1999 by Syngenta Seeds, Inc. in Berthoud, Colorado. Jackpot was selected for early maturity, medium height semidwarf with good test weight patterns.
3. Jackpot has been tested regionally since 2005 by Syngenta in Texas, Nebraska, South Dakota, Colorado Oklahoma and Kansas. It appears to be best adapted to southern Kansas, Texas and Oklahoma.
4. It has moderate resistance to leaf rust and resistant to the prevalent races of stripe rusts.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

- |   |   |
|---|---|
| 1. <u>Kind</u> : Hard Red Winter Wheat    | 2. <u>Growth habit</u> : Winter                       |
| 3. <u>Coleoptile color</u> : White        | 4. <u>Juvenile growth habit</u> : Semi-erect          |
| 5. <u>Leaf color at boot</u> : Green      | 6. <u>Flag leaf at boot</u> : Recurved, Twisted, Waxy |
| 7. <u>Auricle color</u> : Purple          | 8. <u>Days to 50% heading</u> : 99                    |
| 9. <u>Anther color</u> : Yellow           | 10. <u>Stem color</u> : Bronze                        |
| 11. <u>Plant height (cm)</u> : 37in       | 12. <u>Internodes</u> : Hollow                        |
| 13. <u>Spike shape</u> : Tapering         | 14. <u>Spike density</u> : Middense                   |
| 15. <u>Spike curvature</u> : Inclined     | 16. <u>Awn type</u> : Awned                           |
| 17. <u>Awn color</u> : Bronze             | 18. <u>Glume color</u> : Bronze                       |
| 19. <u>Glume length</u> : Long            | 20. <u>Shoulder shape</u> : Rounded                   |
| 21. <u>Shoulder width</u> : Wide          | 22. <u>Beak shape</u> : Acuminate                     |
| 23. <u>Beak length (S, M, L, VL)</u> : VL | 24. <u>Glume pubescence</u> : Absent                  |
| 25. <u>Seed color</u> : Red               | 26. <u>Seed shape</u> : Ovate                         |
| 27. <u>Cheeks</u> : Rounded               | 28. <u>Brush size (S, M, L)</u> : M                   |
| 29. <u>Avg 1,000 kernel wt (g)</u> : 33   | 30. <u>Phenol reaction</u> :                          |
| 31. <u>Other</u> :                        |   |

Physiological/biochemical traits:

Other characteristics (*e.g.*, herbicide tolerance):

Variants and frequency: Jackpot has been uniform and stable since 2006. Less than 0.8% of the plants were rogued from the breeder and foundation seed increases. 90 % of the variant plants were taller height wheat plants (8 to 15 cm). 5% of the variant plants were awnletted and 5% of the variant plants were white chaffed. Up to 1.0% variant plants may be encountered in subsequent generations. Up to 1.8% white seed variant may be encountered.

Continued on next page (22)



**Jackpot**  
**AP04T8211 (Exp)**  
**Amended – Variant Change**

Variety Name Jackpot

Experimental Designation(s) AP04T8211

Date SGVRB first recommended this variety March, 2009

Date(s) any previous amendments were recommended     

Date this amendment was submitted April 7, 2017

6. Recognized classes of Jackpot are breeder, foundation, registered and certified. Syngenta Seeds, Inc. will maintain the variety by the headrow method. Jackpot may only be sold as a class of certified seed and all seed sales are royalty bearing.
7. Certified seed sales of Jackpot will be available in the fall of 2009.
8. Plant Variety Protection will be submitted in 2009 and Jackpot may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Apr 7, 2017

Date recommended by the VRB: Aug 8, 2017



# Wheat

## SY Command

### 04PN066-7 (Exp)

#### Amended – Adaptation Change

Variety Name SY Command

Experimental Designation(s) 04PN066-7

Date SGVRB first recommended this variety Apr 25, 2017

Date(s) any previous amendments were recommended     

Date this amendment was submitted June 16, 2017

1. SY Command is a soft white winter wheat developed by Syngenta Participations AG.
2. SY Command was selected for height, maturity, appearance, kernel color, kernel soundness, disease reaction and end use quality in early generations using a bulk breeding method that originated with a single cross made in January of 2004.
3. SY Command is primarily adapted to lower rainfall dryland areas in Central and Southern Washington and Northern Oregon as well as the Northern Highway 2 region and Spokane area of Washington.
4. SY Command has shown above average resistance to Stripe Rust. SY Command has tested average milling and adequate baking.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common, Soft White Winter Wheat</u>		
	If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)		
2. Seasonal Growth Habit:	<u>Winter</u>	16. Awn Type:	<u>Awne</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color:	<u>White</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>long</u>
6. Flag Leaf at Boot:	<u>Recurved, Twisted, Wax Present</u>	20. Shoulder Shape:	<u>Oblique</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Narrow</u>
8. Day(s) to 50% Heading:	<u>142</u>	22. Beak Shape:	<u>Acuminate</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>Medium</u>
10. Anthocyanin:	<u>Absent</u>	24. Glume Pubescence:	<u>Absent</u>
11. Plant Height (cm):	<u>81</u>	25. Seed Color:	<u>White</u>
12. Internodes:	<u>hollow</u>	26. Seed Shape:	<u>Ovate</u>
13. Spike Shape:	<u>Oblong</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Lax</u>	28. Brush Size (S,M,L.):	<u>Medium</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g):	<u>34</u>

#### 30. Physiological/biochemical Traits:

Variants and frequency: Less than 0.5% of plants were rogued from the Breeder Seed increase. Ninety percent of the variant plants were taller (4 to 10 cm). Twenty percent of the variants were awnless as opposed to the predominant awned typed. Up to 1% variant plants may be encountered in subsequent generations. Up to 0.5% red seed may be encountered in all classes of certified production.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row/progeny method to produce breeder seed as needed. Royalty fees are anticipated.
7. Certified seed will likely be available Fall of 2017
8. Plant Variety Protection is anticipated in 2017 and SY Command may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jun 16, 2017

Date recommended by the VRB: Aug 8, 2017



**Wheat**  
**SY Dayton**  
**09PN062#18 (Exp)**  
**Amended – Description Change**

Variety Name SY Dayton  
 Experimental Designation(s) 09PN062#18  
 Date SGVRB first recommended this variety Apr 28, 2017  
 Date(s) any previous amendments were recommended \_\_\_\_\_  
 Date this amendment was submitted June 16, 2017

1. SY Dayton is a soft white winter wheat developed by Syngenta Participations AG.
2. SY Dayton was selected for height, maturity, appearance, kernel color, kernel soundness, disease reaction and end use quality in early generations using a DH breeding method that originated with a single cross made in January of 2009.
3. SY Dayton is primarily adapted to high rainfall dryland production in Southern Washington and Northern Oregon.
4. SY Dayton has shown above average stripe rust tolerance and foot rot tolerance.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common, Soft White Winter Wheat</u>	
	If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)	
2. Seasonal Growth Habit:	<u>Winter</u>	16. Awn Type: <u>Awed</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color: <u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color: <u>White</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length: <u>Medium</u>
6. Flag Leaf at Boot:	<u>Recurved, Twisted, Wax Present</u>	20. Shoulder Shape: <u>Rounded</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width: <u>Narrow</u>
8. Day(s) to 50% Heading:	<u>142</u>	22. Beak Shape: <u>Acuminate</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL): <u>Long</u>
10. Anthocyanin:	<u>Absent</u>	24. Glume Pubescence: <u>Present</u>
11. Plant Height (cm):	<u>77</u>	25. Seed Color: <u>White</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape: <u>Ovate</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks: <u>Rounded</u>
14. Spike Density:	<u>Middense</u>	28. Brush Size (S,M,L.): <u>Medium</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g): <u>47</u>

30. Physiological/biochemical Traits:

Variants and frequency: Less than 0.5% of plants were rogued from the Breeder Seed increase. Ninety percent of the variant plants were taller (8 to 12 cm). Six percent of the variants were awnless as opposed to the predominant awned typed. Up to 0.1% variant plants may be encountered in subsequent generations. Up to 0.3% red seed may be encountered in all classes of certified production.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row/progeny method to produce breeder seed as needed. Royalty fees are anticipated.
7. Certified seed will likely be available Fall of 2017.
8. Plant Variety Protection is anticipated in 2017 and SY Dayton may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Apr 7, 2017                      Date recommended by the VRB: Aug 8, 2017



# Wheat

## SY Flint

**06BC722#25 (Exp)**

### Amended – Variant Change

Variety Name SY Flint  
Experimental Designation(s) 06BC722#25  
Date SGVRB first recommended this variety May 4, 2015  
Date(s) any previous amendments were recommended \_\_\_\_\_  
Date this amendment was submitted April 7, 2017

1. SY Flint is a hard red winter common wheat bred and developed by Syngenta Seeds.
2. SY Flint was selected for average test weight, height, green leaf duration, quality and yield.
3. SY Flint has shown good adaptation throughout the Central Plains winter wheat growing regions based on tests conducted in Kansas.
4. SY Flint has tested resistant to leaf rust and hessian fly.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common, Hard Red Winter Wheat</u>		
	If common, provide appropriate kernel characteristic: <u>(Hard Red, Soft Red, Hard White, Soft White)</u>		
2. Seasonal Growth Habit:	<u>Winter</u>	16. Awn Type:	<u>Awmed</u>
3. Coleoptile Color:	<u>Absent / White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color:	<u>White</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Medium</u>
6. Flag Leaf at Boot:	<u>Erect, Twisted, Wax Absent</u>	20. Shoulder Shape:	<u>Oblique</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Medium</u>
8. Days to 50% Heading:	<u>124</u>	22. Beak Shape:	<u>Acuminate</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>M</u>
10. Anthocyanin:	<u>Absent</u>	24. Glume Pubescence:	<u>Not present</u>
11. Plant Height (cm):	<u>81</u>	25. Seed Color:	<u>Red</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Ovate</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Lax</u>	28. Brush Size (S,M,L.):	<u>Short</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g):	<u>36</u>

#### 30. Physiological/biochemical Traits:

Variants and frequency: SY Flint has been uniform and stable since 2013. Approximately 0.8% of the plants were rogued from the Breeder's seed increase in 2010. Approximately 99% of the rogued variant plants were taller height wheat plants (8 to 15 cm), 1% were awnletted. Up to 1.0% variant plants may be encountered in subsequent generations. Up to 1.8% white seed variant may be encountered.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed as needed. Royalty fees are anticipated.
7. Certified seed will likely be available for planting in the Fall of 2015.
8. Plant Variety Protection is anticipated in 2015 and SY Flint may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Apr 7, 2017

Date recommended by the VRB: Aug 8, 2017



**Wheat**  
**SY Grit**  
**05BC041-10-10 (Exp)**  
**Amended – Variant Change**

Variety Name SY Grit  
 Experimental Designation(s) 05BC041-10-10  
 Date SGVRB first recommended this variety May 4, 2015  
 Date(s) any previous amendments were recommended \_\_\_\_\_  
 Date this amendment was submitted April 7, 2017

1. SY Grit is a hard red winter wheat bred and developed by Syngenta Seeds, Inc.
2. SY Grit was selected for based on yield, disease, quality and resistance to leaf and stripe rust using a modified bulk breeding method that originated with a single cross made in 2005.
3. SY Grit was determined through testing to be best adapted to Hard Red wheat growing regions in Kansas, Oklahoma, and Texas.
4. SY Grit has moderate resistance to current leaf rust and Stripe rust races. It also has resistance to BYDV and SBMV.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common, Hard Red Winter Wheat</u>		
	If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)		
2. Seasonal Growth Habit:	<u>Winter</u>	16. Awn Type:	<u>Awned</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color:	<u>White</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Long</u>
6. Flag Leaf at Boot:	<u>Erect, Twisted, Wax Absent</u>	20. Shoulder Shape:	<u>Square</u>
7. Auricle Color:	<u>Purple</u>	21. Shoulder Width:	<u>Medium</u>
8. Day(s) to 50% Heading:	<u>123</u>	22. Beak Shape:	<u>Acuminate</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>L</u>
10. Anthoncyanin:	<u>Absent</u>	24. Glume Pubescence:	<u>Absent</u>
11. Plant Height (cm):	<u>83</u>	25. Seed Color:	<u>Red</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Ovate</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Lax</u>	28. Brush Size (S,M,L.):	<u>S</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g):	<u>35</u>

30. Physiological/biochemical Traits:

Variants and frequency: Approximately 0.8% of the plants were rogued from the Breeder’s seed increase in 2015. Approximately 85% of the rogued variant plants were taller height wheat plants (8 to 15 cm) and 15% awn less plants. Up to 1.0% variant plants may be encountered in subsequent generations. Up to 1.8% white seed variant may be encountered.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row/progeny method to produce breeder seed as needed. Royalty fees are anticipated.
7. Certified seed will likely be available Fall 2016.
8. Plant Variety Protection is anticipated in 2016 and SY Grit may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Apr 7, 2017                      Date recommended by the VRB: Aug 8, 2017



# Wheat

## SY Llano AP09T9614 (Exp) Amended – Variant Change

Variety Name SY Llano

Experimental Designation(s) AP09T9614

Date SGVRB first recommended this variety April 4, 2014

Date(s) any previous amendments were recommended \_\_\_\_\_

Date this amendment was submitted April 7, 2017

1. SY Llano is a hard red winter wheat bred and developed by Syngenta Seeds, Inc.
  2. SY Llano is the result of a cross made in 2006-by Syngenta Seeds, Inc. in Vernon, Texas. SY Llano was selected for its early maturity and resistance to endemic races of leaf rust.
  3. SY Llano is best adapted to the High Plains of Texas and north central Oklahoma.
  4. SY Llano is resistant to stripe rust, moderately resistant to moderately susceptible to leaf rust, resistant to soil borne mosaic virus, susceptible to powdery mildew, and tolerant of acid soils.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common, Hard Red Winter Wheat</u>		
	If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)		
2. Seasonal Growth Habit:	<u>Winter</u>	16. Awn Type:	<u>Awned</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color:	<u>White/Amber</u>
5. Leaf Color at Boot:	<u>Blue-Green</u>	19. Glume Length:	<u>Medium</u>
6. Flag Leaf at Boot:	<u>Erect, Twisted, Waxy</u>	20. Shoulder Shape:	<u>Square</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Medium</u>
8. Days to 50% Heading:	<u>91</u>	22. Beak Shape:	<u>Acute</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>Medium</u>
10. Stem Color:	<u>Anthocyanin Absent</u>	24. Glume Pubescence:	<u>Absent</u>
11. Plant Height (cm):	<u>69.9</u>	25. Seed Color:	<u>Red</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Elliptical</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Mid Dense</u>	28. Brush Size (S,M,L.):	<u>Short</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g):	<u>27.3</u>

### 30. Physiological/biochemical Traits:

Variants and frequency: Less than .06% of the plants were rogued from the Breeder seed increase. Approximately 95% of the rogued variant plans were taller height and the other variants were awnless. Up to 1.0% variant plants may be encountered in subsequent generations. Up to 1.8% white seed variant may be encountered.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.
7. Certified seed will be available in the fall of 2015.
8. Plant Variety Protection is anticipated in 2014 and SY Llano may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Apr 7, 2017

Date recommended by the VRB: Aug 8, 2017



# Wheat

## SY Monument 04BC574-2 (Exp) Amended – Variant Change

Variety Name SY Monument

Experimental Designation(s) 04BC574-2

Date SGVRB first recommended this variety April 4, 2014

Date(s) any previous amendments were recommended \_\_\_\_\_

Date this amendment was submitted April 7, 2017

1. SY Monument is a hard red winter wheat bred and developed by Syngenta Seeds, Inc.
2. SY Monument is the result of a cross made in 2003 by Syngenta Seeds, Inc. in Junction City, KS. SY Monument was selected for height, straw strength, yield, bread making quality and resistance to leaf and stripe rust.
3. SY Monument is best adapted to the winter wheat growing areas of the High Plains.
4. SY Monument has a high level of tolerance to low Ph soils.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common, Hard Red Winter Wheat</u>		
	If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)		
2. Seasonal Growth Habit:	<u>Winter</u>	16. Awn Type:	<u>Awned</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color:	<u>White/Amber</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Medium</u>
6. Flag Leaf at Boot:	<u>Erect, Non-twisted, Waxy</u>	20. Shoulder Shape:	<u>Oblique</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Medium</u>
8. Days to 50% Heading:	<u>127</u>	22. Beak Shape:	<u>Acuminate</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>Medium</u>
10. Stem Color:	<u>Anthocyanin absent</u>	24. Glume Pubescence:	<u>Absent</u>
11. Plant Height (cm):	<u>84</u>	25. Seed Color:	<u>Red</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Ovate</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Mid Dense</u>	28. Brush Size (S,M,L.):	<u>Medium</u>
15. Spike Curvature:	<u>Nodding</u>	29. Avg 1,000 Kernel Wt (g):	<u>36</u>

### 30. Physiological/biochemical Traits:

Variants and frequency: Less than 1% of the plants were rogued from the breeder seed increase in Eaton, CO. Approximately 97% of the rogued variant plants were taller height wheat plants (8 to 15cm). The other variants were heads with different chaff color (red). Up to 1.0% variant plants may be encountered in subsequent generations. Up to 1.8% white seed variant may be encountered.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.
7. Certified seed will be available in the fall of 2015.
8. Plant Variety Protection is anticipated in 2014 and SY Monument may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Apr 7, 2017

Date recommended by the VRB: Aug 8, 2017





# Wheat

## SY Razor

AP08TA6927 ( Exp)

### Amended – Variant Change

Variety Name SY Razor

Experimental Designation(s) AP08TA6927

Date SGVRB first recommended this variety March, 2013

Date(s) any previous amendments were recommended \_\_\_\_\_

Date this amendment was submitted April 7, 2017

1. SY Razor is a hard red winter wheat bred and developed by Syngenta Seeds, Inc.
  2. SY Razor was selected for resistance to resistance to endemic diseases (leaf rust, stripe rust and powdery mildew), early plant maturity and because it was awnleted.
  3. SY Razor has been included in replicated yield tests in Oklahoma and Texas.
  4. SY Razor is an excellent production choice as a dual-purpose wheat or as a cultivar for grain or forage-only systems (Table 6). SY Razor has better test weight than popular awned wheats. Milling and baking qualities of SY Razor have been acceptable.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Hard Red Winter</u>	2. Seasonal Growth Habit:	<u>Winter</u>
3. Coleoptile Color:	<u>White</u>	4. Juvenile Growth Habit:	<u>Semi-erect</u>
5. Leaf Color at Boot:	<u>Green</u>	6. Flag Leaf at Boot:	<u>Erect, Twisted, Waxy</u>
7. Auricle Color:	<u>Purple</u>	8. Days to 50% Heading:	<u>96.6</u>
9. Anther Color:	<u>Yellow</u>	10. Stem Color:	<u>Absent</u>
11. Plant Height (cm):	<u>87.1</u>	12. Internodes:	<u>Hollow</u>
13. Spike Shape:	<u>Tapering</u>	14. Spike Density:	<u>Lax</u>
15. Spike Curvature:	<u>Inclined</u>	16. Awn Type:	<u>Awnleted</u>
17. Awn Color:	<u>White</u>	18. Glume Color:	<u>White</u>
19. Glume Length:	<u>Long</u>	20. Shoulder Shape:	<u>Square</u>
21. Shoulder Width:	<u>Wide</u>	22. Beak Shape:	<u>Obtuse</u>
23. Beak Length (S.M.L.VL):	<u>S</u>	24. Glume Pubescence:	<u>Glabrous</u>
25. Seed Color:	<u>Red</u>	26. Seed Shape:	<u>Ovate</u>
27. Cheeks:	<u>Rounded</u>	28. Brush Size (S,M,L.):	<u>S</u>
29. Avg 1,000 Kernel Wt (g):	<u>34.4</u>		

Physiological/biochemical Traits: \_\_\_\_\_

Variants and frequency: Up to 1.0% variant plants have been encountered. The variants are taller (8-15cm). Up to 1.8% white seed variant may be encountered.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.
7. Certified seed will be available in the fall of 2014.
8. Plant Variety Protection is anticipated in 2013 and SY Razor may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies

Date this application was submitted: Apr 7, 2017

Date recommended by the VRB: Aug 8, 2017



# Wheat

## SY Sunrise 06BC796#68 (Exp)

### Amended – Variant Change

Variety Name SY Sunrise  
Experimental Designation(s) 06BC796#68  
Date SGVRB first recommended this variety May 4, 2015  
Date(s) any previous amendments were recommended \_\_\_\_\_  
Date this amendment was submitted April 7, 2017

1. SY Sunrise is a hard red winter common wheat bred and developed by Syngenta Seeds.
  2. SY Sunrise was selected for average test weight, height, green leaf duration, quality and yield.
  3. Syngenta has determined that SY Sunrise is adapted throughout the winter wheat growing areas of the United States Central Plains based on tests conducted in Kansas, Colorado, and Nebraska.
  4. SY Sunrise has tested moderately resistant to leaf rust. It has tested moderately susceptible to stripe rust. It is susceptible to acidic soils.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common, Hard Red Winter Wheat</u>		
If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)			
2. Seasonal Growth Habit:	<u>Winter</u>	16. Awn Type:	<u>Awed</u>
3. Coleoptile Color:	<u>Absent</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color:	<u>White</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Medium</u>
6. Flag Leaf at Boot:	<u>Erect, Twisted, Wax Absent</u>	20. Shoulder Shape:	<u>Oblique</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Medium</u>
8. Days to 50% Heading:	<u>128</u>	22. Beak Shape:	<u>Acuminate</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>M</u>
10. Anthoncyanin:	<u>Absent</u>	24. Glume Pubescence:	<u>Not present</u>
11. Plant Height (cm):	<u>76</u>	25. Seed Color:	<u>Red</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Ovate</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Lax</u>	28. Brush Size (S,M,L.):	<u>Short</u>
15. Spike Curvature:	<u>Erect</u>	29. Avg 1,000 Kernel Wt (g):	<u>36</u>

#### 30. Physiological/biochemical Traits:

Variants and frequency: SY Sunrise has been uniform and stable since 2013. Approximately 0.8% of the plants were rogued from the Breeder's seed increase in 2010. Approximately 98% of the rogued variant plants were taller height wheat plants (8 to 15 cm), 2% were awnleted. Up to 1.0% variant plants may be encountered in subsequent generations. Up to 1.8% white seed variant may be encountered.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed as needed. Royalty fees are anticipated.
7. Certified seed will likely be available for planting in the Fall of 2016.
8. Plant Variety Protection is anticipated in 2015 and SY Sunrise may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Apr 7, 2017

Date recommended by the VRB: Aug 8, 2017



# Wheat

## SY Wolf

### BC01007-7 (Exp)

#### Amended – Variant Change

Variety Name SY Wolf

Experimental Designation(s) BC01007-7

Date SGVRB first recommended this variety May, 2011

Date(s) any previous amendments were recommended \_\_\_\_\_

Date this amendment was submitted April 28, 2017

1. SY Wolf is a hard red winter wheat bred and developed by Syngenta Seeds, Inc.
2. SY Wolf is the result of a cross W99-331/97x0906-8 made in the spring of 2001 by Syngenta Seeds, Inc.
3. SY Wolf is best adapted to North and South Dakota, Western Nebraska.
4. SY Wolf is moderately resistance to leaf rust, powdery mildew, septoria and tan spot.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

- |  |   |
|--|---|
| 1. <u>Kind</u> : Common                  | 2. <u>Growth habit</u> : Winter               |
| 3. <u>Coleoptile color</u> : Red         | 4. <u>Juvenile growth habit</u> : Semi-erect  |
| 5. <u>Leaf color at boot</u> : Green     | 6. <u>Flag leaf</u> : Waxy, Recurved, Twisted |
| 7. <u>Auricle color</u> : Purple         | 8. <u>Days to 50% heading</u> : 125           |
| 9. <u>Anther color</u> : Yellow          | 10. <u>Stem color</u> : Absent                |
| 11. <u>Plant height (cm)</u> : 87        | 12. <u>Internodes</u> : Hollow                |
| 13. <u>Spike shape</u> : Tapering        | 14. <u>Spike density</u> : Middense           |
| 15. <u>Spike curvature</u> : Inclined    | 16. <u>Awn type</u> : Awned                   |
| 17. <u>Awn color</u> : White             | 18. <u>Glume color</u> : White/Amber          |
| 19. <u>Glume length</u> : Midlong        | 20. <u>Shoulder shape</u> : Square            |
| 21. <u>Shoulder width</u> : Midwide      | 22. <u>Beak shape</u> : Acuminate             |
| 23. <u>Beak length (S, M, L, VL)</u> : L | 24. <u>Glume pubescence</u> : Absent          |
| 25. <u>Seed color</u> : Red              | 26. <u>Seed shape</u> : Ovate                 |
| 27. <u>Cheeks</u> : Rounded              | 28. <u>Brush size (S,M, L)</u> : M            |
| 29. <u>Avg 1,000 kernel wt (g)</u> : 36  | 30. <u>Phenol reaction</u> :                  |
| 31. <u>Other</u> :                       |   |

Physiological/biochemical traits:

Other characteristics (*e.g.*, herbicide tolerance):

Variants and frequency: SY Wolf has been uniform and stable since 2009. Approximately 0.8% of the plants were rogued from the Breeder's seed increase in 2010. Approximately 90% of the rogued variant plants were taller height wheat plants (8 to 15 cm) and 5% were awnless and 5% were red chaffed. Up to 0.8% variant plants may be encountered in subsequent generations. Up to 1.8% white seed variant may be encountered.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row method to produce breeder seed if needed.
7. Foundation seed will be available in the Fall of 2011 with certified seed available in 2012.
8. Plant Variety Protection is anticipated in the fall of 2011 and SY Wolf may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Apr 7, 2017

Date recommended by the VRB: Aug 8, 2017



**Wheat**  
**Paradise**  
**AP11T2227 (Exp)**  
**Amended (Name Change)**

Variety Name Paradise  
 Experimental Designation(s) AP11T2227  
 Date SGVRB first recommended this variety Apr 20, 2017  
 Date(s) any previous amendments were recommended \_\_\_\_\_  
 Date this amendment was submitted April 28, 2017

1. Paradise is a hard red winter wheat developed by Syngenta Participations AG.
2. Paradise was selected for height, maturity and green leaf duration.
3. Paradise was tested in and is adapted to Central and Southern Plains. Best adapted for dryland production but can be produced under irrigation.
4. Paradise is moderately resistant to stripe rust but moderately susceptible to leaf rust. Tolerance to both SBMV and acid soils. Susceptible to FHB.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	<u>Common, Hard Red Winter Wheat</u>		
	If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)		
2. Seasonal Growth Habit:	<u>Winter</u>	16. Awn Type:	<u>Awned</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color:	<u>White</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Long</u>
6. Flag Leaf at Boot:	<u>Recurved, Twisted, Wax Absent</u>	20. Shoulder Shape:	<u>Oblique</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Medium</u>
8. Day(s) to 50% Heading:	<u>123</u>	22. Beak Shape:	<u>Acute</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>Medium</u>
10. Anthocyanin:	<u>Absent</u>	24. Glume Pubescence:	<u>Present</u>
11. Plant Height (cm):	<u>84</u>	25. Seed Color:	<u>Red</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Ovate</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Lax</u>	28. Brush Size (S,M,L.):	<u>Medium</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g):	<u>36</u>

30. Physiological/biochemical Traits:

Variants and frequency: Approximately 0.8% of the plants were rogued from the Breeder’s seed increase in 2015. Approximately 99% of the rogued variant plants were taller height wheat plants (8 to 15 cm). Up to 1.0% variant plants may be encountered in subsequent generations. We also would expect to see up to 1.8% white seed variant.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row/progeny method to produce breeder seed as needed. Royalty fees are anticipated.
7. Certified seed will likely be available Fall of 2017.
8. Plant Variety Protection is anticipated in 2017.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Apr 28, 2017      Date recommended by the VRB: Aug 8, 2017



# Wheat

## PNW Hailey 09PN046#28 (Exp) Amended – Name Change

Variety Name PNW Hailey

Experimental Designation(s) 09PN046#28

Date SGVRB first recommended this variety Apr 20, 2017

Date(s) any previous amendments were recommended \_\_\_\_\_

Date this amendment was submitted April 28, 2017

1. PNW Hailey is a soft white winter wheat bred and developed by Syngenta Participations AG.
2. PNW Hailey was selected for maturity, plant height uniformity, disease reaction and satisfactory preliminary quality screen.
3. PNW Hailey has shown good adaptation in the high to moderate rainfall regions of western Idaho, eastern Washington, north-central and northeastern Oregon and irrigated production in the southern Snake River region of Idaho and the irrigated production areas of Washington.
4. PNW Hailey has above average tolerance to stripe rust.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind: Common, Soft White Winter Wheat

If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)

2. Seasonal Growth Habit:	<u>Winter</u>	16. Awn Type:	<u>Awed</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color:	<u>White</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Long</u>
6. Flag Leaf at Boot:	<u>Recurved, Twisted Wax Present</u>	20. Shoulder Shape:	<u>Oblique</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Wide</u>
8. Day(s) to 50% Heading:	<u>143</u>	22. Beak Shape:	<u>Acute</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>Long</u>
10. Anthocyanin:	<u>Absent</u>	24. Glume Pubescence:	<u>Absent</u>
11. Plant Height (cm):	<u>98</u>	25. Seed Color:	<u>White</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Ovate</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Lax</u>	28. Brush Size (S,M,L.):	<u>Short</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g):	<u>57</u>

### 30. Physiological/biochemical Traits:

Variants and frequency: Less than 0.5% of plants were rogued from the Breeder Seed increase. Ninety percent of the variant plants were taller (8 to 12 cm). Four percent of the variants were awnless as opposed to the predominant awned typed. Up to 0.1% variant plants may be encountered in subsequent generations. Up to 0.3% red seed may be encountered in all classes of certified production.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row/progeny method to produce breeder seed as needed. Royalty fees are anticipated.
7. Certified seed will likely be available Fall of 2017.
8. Plant Variety Protection is anticipated in 2017.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Apr 28, 2017

Date recommended by the VRB: Aug 8, 2017



# Wheat

## Mpress

### 09PN066#36 (Exp)

### Amended – (Name Change)

Variety Name PNW Hailey

Experimental Designation(s) 09PN046#28

Date SGVRB first recommended this variety Apr 20, 2017

Date(s) any previous amendments were recommended \_\_\_\_\_

Date this amendment was submitted April 28, 2017

1. Mpress is a soft white winter wheat bred and developed by Syngenta Participations AG.
2. Mpress was selected for maturity, plant height uniformity, disease reaction and satisfactory preliminary quality screen.
3. Mpress has shown good adaptation in the high to moderate rainfall regions of western Idaho, eastern Washington, north-central and northeastern Oregon and irrigated production in the southern Snake River region of Idaho and the irrigated production areas of Washington.
4. Mpress has above average tolerance to stripe rust.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind: Common, Soft White Winter Wheat

If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)

2. Seasonal Growth Habit:	<u>Winter</u>	16. Awn Type:	<u>Awne</u>
3. Coleoptile Color:	<u>White</u>	17. Awn Color:	<u>White</u>
4. Juvenile Growth Habit:	<u>Erect</u>	18. Glume Color:	<u>White</u>
5. Leaf Color at Boot:	<u>Green</u>	19. Glume Length:	<u>Medium</u>
6. Flag Leaf at Boot:	<u>Recurved, Twisted, Wax Present</u>	20. Shoulder Shape:	<u>Square</u>
7. Auricle Color:	<u>White</u>	21. Shoulder Width:	<u>Narrow</u>
8. Day(s) to 50% Heading:	<u>145</u>	22. Beak Shape:	<u>Acuminae</u>
9. Anther Color:	<u>Yellow</u>	23. Beak Length (S.M.L.VL):	<u>Medium</u>
10. Anthocyanin:	<u>Absent</u>	24. Glume Pubescence:	<u>Present</u>
11. Plant Height (cm):	<u>82.5</u>	25. Seed Color:	<u>White</u>
12. Internodes:	<u>Hollow</u>	26. Seed Shape:	<u>Ovate</u>
13. Spike Shape:	<u>Tapering</u>	27. Cheeks:	<u>Rounded</u>
14. Spike Density:	<u>Middense</u>	28. Brush Size (S,M,L.):	<u>Long</u>
15. Spike Curvature:	<u>Inclined</u>	29. Avg 1,000 Kernel Wt (g):	<u>54</u>

#### 30. Physiological/biochemical Traits:

Variants and frequency: Less than 0.5% of plants were rogued from the Breeder Seed increase. Ninety percent of the variant plants were taller (8 to 14 cm). One percent of the variants were awnless as opposed to the predominant awned typed. Up to 0.1% variant plants may be encountered in subsequent generations. Up to 0.3% red seed may be encountered in all classes of certified production.

6. Syngenta Seeds, Inc. maintains seed stock and certified classes of Foundation, Registered and Certified. Syngenta Seeds, Inc. will maintain the variety by the head row/progeny method to produce breeder seed as needed. Royalty fees are anticipated.
7. Certified seed will likely be available Fall of 2017.
8. Plant Variety Protection is anticipated in 2017.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Apr 28, 2017

Date recommended by the VRB: Aug 8, 2017



# Wheat

## Erisman

### IL10-19516 (Esp)

1. *Erisman* (IL10-19516) is a soft red winter wheat developed by the University of Illinois Agricultural Experiment Station. The cross of Bess/IL00-8530 was made in the greenhouse in Urbana, IL in January 2006. The three way cross (backcross) of Bess/IL00-8530//IL00-8530 was made in the greenhouse in Urbana, IL in January 2007 from the F<sub>1</sub> generation of Bess/IL00-8530. The F<sub>1</sub> generation of this three way cross was grown in the greenhouse in 2007. The F<sub>2</sub> generation was grown in single rows in Urbana, IL in 2008 and harvested in bulk. Individual heads were selected from the F<sub>3</sub> bulk in 2009 and evaluated in single rows in 2010. A single F<sub>3:4</sub> headrow designated as IL10-19516 was selected in 2010 and evaluated in single plot yield trials in an augmented design in Urbana and Brownstown, IL in 2011. Five heads were selected from this F<sub>3:5</sub> augmented single plot for evaluation in single rows. In 2012, one of these F<sub>3:6</sub> single rows was selected for seed purification and increase of IL10-19516. Also in 2012, IL10-19516 was evaluated in four replicated performance nurseries at Urbana, Brownstown, Carmi and St. Jacob, IL using seed from the F<sub>3:5</sub> generation. Two replications were evaluated at the Urbana and Brownstown locations, with one replication each at Carmi and St. Jacob. From 2013 through 2015 *Erisman* (IL10-19516) was evaluated in all four performance nursery locations with three replications per location. *Erisman* was evaluated in replicated yield trials using a randomized complete block design (RCBD). In 2016 *Erisman* was evaluated in two replications for performance under certified organic conditions in Danforth, IL. Purified and increased seed was also grown under certified organic conditions for further increase as certified organic seed.

Soil fertility was managed on the basis of soil test results. About 100 kg ha<sup>-1</sup> nitrogen was applied over the growing season with about 33 kg ha<sup>-1</sup> applied prior to planting and 67 kg ha<sup>-1</sup> applied in the spring. Organic conditions used 200 kg ha<sup>-1</sup> of composted chicken manure and was over-seeded with white clover in the spring. All plots were sown using a small plot drill. Plots were six rows wide with 18 cm row spacing.

*Erisman* was evaluated from 2012 through 2015 in the Fusarium Head Blight (FHB) evaluation nursery in Urbana, IL. *Erisman* was also evaluated in the Soil Borne Mosaic Virus (SBMV) evaluation nursery in Urbana, IL in 2013, 2014 and 2015. Stripe rust and Septoria leaf blight were evaluated from naturally occurring infections at several locations.

2. *Erisman* was selected for superior yield, test weight, and milling and baking properties under conventional and organic cropping systems. It was also selected for resistance to FHB, stripe rust, septoria leaf blight, and SBMV.
3. *Erisman* is an early maturing soft red winter wheat adapted to Illinois and surrounding states and suitable for organic or low input cropping systems. Please see the attached tables. Because *Erisman* is taller than most current soft red winter wheat varieties it is expected that *Erisman* will be primarily used in organic and low-input conditions, but production of *Erisman* under conventional production is also permitted.
4. *Erisman* is resistant to Stripe Rust (*Puccinia striiformis f.sp. tritici*), Soil Borne Mosaic Virus (SBMV) and *Fusarium* Head Blight (FHB).

Continued on next page (36)



**Wheat**  
**Erisman**  
**IL10-19516 (Esp)**

## 5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Kind:	Commo Soft Red Winter Wheat		
	If common, provide appropriate kernel characteristic: (Hard Red, Soft Red, Hard White, Soft White)		
2. Seasonal Growth Habit:	Winter	16. Awn Type:	Awnletted
3. Coleoptile Color:	White	17. Awn Color:	Tan
4. Juvenile Growth Habit:	Erect	18. Glume Color:	Tan
5. Leaf Color at Boot:	Green	19. Glume Length:	Long
6. Flag Leaf at Boot:	Erect	20. Shoulder Shape:	Oblique
7. Auricle Color:	White	21. Shoulder Width:	Medium
8. Day(s) to 50% Heading:	137.3 Julian days	22. Beak Shape:	Obtuse
9. Anther Color:	Yellow	23. Beak Length (S.M.L.VL):	Short
10. Anthoncyanin:	Absent	24. Glume Pubescence:	Absent
11. Plant Height (cm):	90.9 cm	25. Seed Color:	Red
12. Internodes:	Hollow	26. Seed Shape:	Ovate
13. Spike Shape:	Tapering	27. Cheeks:	Rounded
14. Spike Density:	Mid dense	28. Brush Size (S,M,L.):	Short
15. Spike Curvature:	Erect	29. Avg 1,000 Kernel Wt (g):	36 g

## 30. Physiological/biochemical Traits:

Variants and frequency: The exact number of plants rogued from increases was not recorded, nor was the total number of plants grown in each generation determined; however, in each generation the number of variants rogued was much less than 1 % of the total number of plants. Erisman has been uniform and stable for at least six generations from the F<sub>6</sub> to the F<sub>11</sub> generation. Up to 0.5% tall variants are allowed.

6. Recognized classes of *Erisman* are breeder, foundation, registered, and certified. Arrangements to produce foundation seed and registered seed are pending. Royalty fees and licensing agreements have not been finalized.
7. Certified seed of *Erisman* will likely be available for planting in fall of 2018.
8. Application for PVP for *Erisman* is not planned and descriptive data may be supplied to the PVP database.
9. Certified seed production acreage may be published by AOSCA and individual certifying agencies

Date this application was submitted: Jun 21, 2017

Date recommended by the VRB: Aug 16, 2017



# Barley

## SJ508-447e (Exp)

1. SJ508-447e two-rowed spring forage barley, was developed by WestBred/a unit of Monsanto, from the cross of UC932/YU597-432//Stockford. (Ownership of all barley germplasm has been transferred from WestBred/Monsanto to Highland Specialty Grains).
2. Agronomically desired rows were selected based on standability, tillering, and resistance to leaf rust and stripe rust. SJ508-447e was advanced through the standard pedigree breeding method.
3. SJ508-447e has been tested and shown adaptation to the irrigated acres of Eastern Washington.
4. SJ508-447e is moderately resistant to leaf rust and barley stripe rust.
5. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Growth Habit:	Spring	16. Plant Height (see below):	
2. Spike:	Two-rowed	17. Spike Shape:	Clavate
3. Coleoptile Color:	Green	18. Spike Density:	Mid-Dense
4. Juvenile Growth Habit:	Prostrate	19. Spike Position at Maturity:	Inclined
5. Plant Tillering:	Intermediate	20. Hairiness of Rachis Edge:	Covered
6. Leaf Color at Boot:	Green	21. Rachilla Hair Length:	Long
7. Flag Leaf at Boot:	Erect, Not-Twisted, Waxy Bloom	22. Lemma Awns:	Sessile Hoods
8. Pubescence on Leaf Blade:	No	23. Length of Lemma Awns:	n/a
9. Pubescence on Leaf Sheath:	No	24. Lemma Awn Surface:	n/a
10.:Auricle Color:	White	25. Glume Hairiness:	Covered
11.Heading Date (see below):		26. Glume Awn Surface:	Rough
12. Stem Color:	White	27. Glume/Lemma Adherence:	Covered
13. Neck Shape:	Straight	28. Texture (if covered):	Slightly Wrinkled
14. Collar Shape:	V-shaped	29. Aleurone Color:	Colorless
15. Spike Exsertion:	Full	30. Avg 1,000 Kernel Wt (g):	40.6

Heading date: 77 days which is: 5 Days EARLIER than: Stockford

Plant height: 65.0 cm, which is 30 cm SHORTER than: Stockford

Physiological or biochemical traits:

Variants and their frequency: SJ508-447e is stable and uniform in appearance and performance, which has been observed through the F6 through F10 generations. SJ508-447e may contain a tall variant (3-6 inches taller), and earlier heading variant (2-4 days earlier), at frequencies of up to 6/10,000 plants (0.06%). An awned variant may occur at 2/10,000 plants (0.02%). No other variants are known to occur.

6. Highland Specialty Grains will maintain breeder seed by planting head rows when necessary. The certified classes of seed shall be: Foundation, Registered, and Certified.
7. Certified seed will possibly be sold in the fall of 2017.
8. Application will be made for protection in the United States of America under the Plant Variety Protection Act.
9. Certified seed production acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jul 3, 2017

Date recommended by the VRB: Aug 16, 2017



# Barley

## Altorado

### BZ509-601, TR13740 (Exp)

1. Altorado, (BZ509-601, TR13740) two-rowed spring barley was developed by WestBred/a unit of Monsanto, from the cross of Xena/YU501-385. (Ownership of all barley germplasm has been transferred to Highland Specialty Grains).
2. Agronomically desirable rows were selected based on seed size, standability, and tillering. Altorado was advanced through the standard pedigree breeding method.
3. Altorado has been tested and shown adaptation to the western prairies of Canada as well as the barley growing regions of the Pacific Northwest, specifically Eastern Washington and Montana.
4. Altorado is moderately resistant to stem rust, the spot form of net-blotch, loose smut, and common root rot. Altorado has a moderately resistant/moderately susceptible reaction to Fusarium head blight. Altorado is susceptible to the net form of net-blotch, and scald.

6. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Growth Habit:	<u>Spring</u>	16. Plant Height (see below):	
2. Spike:	<u>2 row</u>	17. Spike Shape:	<u>Clavate</u>
3. Coleoptile Color:	<u>Green</u>	18. Spike Density:	<u>Mid-dense</u>
4. Juvenile Growth Habit:	<u>Erect</u>	19. Spike Position at Maturity:	<u>Nodding</u>
5. Plant Tillering:	<u>Intermediate</u>	20. Hairiness of Rachis Edge:	<u>Few</u>
6. Leaf Color at Boot:	<u>Green</u>	21. Rachilla Hair Length:	<u>Long</u>
7. Flag Leaf at Boot:	<u>Erect, Not Twisted, Waxy-Bloom</u>	22. Lemma Awns:	<u>Straight</u>
8. Pubescence on Leaf Blade:	<u>No</u>	23. Length of Lemma Awns:	<u>Long</u>
9. Pubescence on Leaf Sheath:	<u>No</u>	24. Lemma Awn Surface:	<u>Rough</u>
10. Auricle Color:	<u>White</u>	25. Glume Hairiness:	<u>Middle Only</u>
11. Heading Date (see below):		26. Glume Awn Surface:	<u>Rough</u>
12. Stem Color:	<u>White</u>	27. Glume/Lemma Adherence:	<u>Covered</u>
13. Neck Shape:	<u>Straight</u>	28. Texture (if covered):	<u>Semi-Wrinkled</u>
14. Collar Shape:	<u>V-shape</u>	29. Aleurone Color:	<u>Colorless</u>
15. Spike Exsertion:	<u>Full</u>	30. Avg 1,000 Kernel Wt (g):	<u>49.1g</u>

Heading date: 53.4 which is: .1 Day(s) LATER than: Xena

Plant height: 79.1 cm, which is 2.4 cm SHORTER than: Xena

Physiological or biochemical traits:

Variants and their frequency: Altorado is a stable and uniform variety in appearance and performance which has been observed through the F6 to F10 generations. Altorado may contain a tall variant (3-6 inches taller) at a frequency of up to 4/10,000 plants. (0.04%). No other variants are known to occur.

6. Highland Specialty Grains and Crop Production Services (CPS) of Canada will maintain breeder seed by planting head rows when necessary. The certified classes of seed shall be: Select, Foundation, Registered, and Certified.
7. Certified Seed will possibly be sold in the Spring of 2018.
8. Application will be made for protection in the United States of America under the Plant Variety Protection Act and in Canada under the Plant Breeder Rights Act.
9. Certified seed production acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jul 3, 2017

Date recommended by the VRB: Aug 16, 2017



**Barley**  
**AKF-AXCEL**  
**P15Y8009 (Exp)**  
**Amended – Name Change**

Variety Name AKF-AXCEL  
 Experimental Designation(s) P15Y8009  
 Date SGVRB first recommended this variety Sep 1, 2016  
 Date(s) any previous amendments were recommended \_\_\_\_\_  
 Date this amendment was submitted Jul 6, 2017

1. AKF-AXCEL is a 2-row spring hay barley developed by Phoenix Seed, Inc.
2. AKF-AXCEL was developed using the pedigree method with selection for hood type, fertility, straw strength, height, tillering, and forage quality.
3. AKF-AXCEL has been tested in Fargo, ND, Bozeman, MT and Northern California and is adapted to the Northern Great Plains as a forage barley.
4. AKF-AXCEL has not been tested for disease reactions.
7. Identifying characteristics – insert the descriptive term from the Objective Description:

1. Growth Habit:	<u>Spring</u>	16. Plant Height (see below):	<u>87.7</u>
2. Spike:	<u>2 row</u>	17. Spike Shape:	<u>Oblong</u>
3. Coleoptile Color:	<u>Green</u>	18. Spike Density:	<u>Mid-dense</u>
4. Juvenile Growth Habit:	<u>Erect</u>	19. Spike Position at Maturity:	<u>Erect</u>
5. Plant Tillering:	<u>High</u>	20. Hairiness of Rachis Edge:	<u>Covered</u>
6. Leaf Color at Boot:	<u>Green</u>	21. Rachilla Hair Length:	<u>Long</u>
7. Flag Leaf at Boot:	<u>Recurved, Not Twisted, Waxy Bloom</u>	22. Lemma Awns:	<u>Sessile Hoods</u>
8. Pubescence on Leaf Blade:	<u>No</u>	23. Length of Lemma Awns:	<u>Short</u>
9. Pubescence on Leaf Sheath:	<u>No</u>	24. Lemma Awn Surface:	<u>Smooth</u>
10.: Auricle Color:	<u>White</u>	25. Glume Hairiness:	<u>Covered</u>
11. Heading Date (see below):	<u>184.2</u>	26. Glume Awn Surface:	<u>Smooth</u>
12. Stem Color:	<u>White</u>	27. Glume/Lemma Adherence:	<u>Covered</u>
13. Neck Shape:	<u>Straight</u>	28. Texture (if covered):	<u>Wrinkled</u>
14. Collar Shape:	<u>Closed</u>	29. Aleurone Color:	<u>Colorless</u>
15. Spike Exsertion:	<u>Slight</u>	30. Avg 1,000 Kernel Wt (g):	<u>47</u>

Heading date: 184.2 which is: 1 Day(s) (EARLIER) (LATER) than: Stockford

Plant height: 87.7 cm, which is 3.6 cm (SHORTER) (TALLER) (SAME AS) Stockford

Physiological or biochemical traits: P15Y8009 has deficiens laterals.

Variants and their frequency: AKF-AXCEL may contain up to 0.25% of any of the following variants in subsequent generations: medium tall, non-deficiens laterals or non-hooded awns.

6. Recognized classes are breeder, foundation, registered, and certified seed. Phoenix Seed, Inc. will maintain its purity by the head-row method to produce breeder seed as needed.
7. Certified seed may be available in summer of 2017.
8. Application for PVP is anticipated for AKF-AXCEL. Title V option will likely not be taken.
9. Certified seed production acreage is not to be published by AOSCA and certifying agencies.

Date this application was submitted: Jul 6, 2017

Date recommended by the VRB: Aug 8, 2017



# Triticale

## APB133 470,133 (Exp)

1. APB133 (470,133) is a spring triticale developed by Arizona Plant Breeders.
2. APB133 was selected for forage yield and quality using the pedigree method.
3. APB133 has been tested in the forage triticale production regions of the San Joaquin Valley of California and found to be well adapted to this production region.
4. NA

5. Identifying characteristics – insert the appropriate descriptive term from the Objective Description:

1. Ploidy:	<u>Hexaploid</u>	15. Awn Color:	<u>White</u>
2. Growth Habit:	<u>Spring</u>	16. Glume Pubescence:	<u>Glabrous</u>
3. Photoperiod Reaction:	<u>Insensitive</u>	17. Glume Color:	<u>White</u>
4. Winterhardiness:	<u>Low</u>	18. Glume Length:	<u>Mid-long</u>
5. Maturity:	<u>Mid-season</u>	19. Glume Width:	<u>Mid-wide</u>
6. Height:	<u>Short</u>	20. Glume Shoulder Shape:	<u>Oblique</u>
7. Plant Color at Boot Stage:	<u>Blue-green</u>	21. Glume Beak Shape:	<u>Obtuse</u>
8. Stem Anthocyanin:	<u>Present</u>	22. Coleoptile Color:	<u>White</u>
9. Neck Hairiness:	<u>None</u>	23. Seed Shape:	<u>Elliptical</u>
10. Neck Shape:	<u>Straight</u>	24. Seed Smoothness:	<u>Slightly Wrinkled</u>
11. Flag Leaf at Boot:	<u>Twisted, Erect, Waxy Bloom Absent</u>	25. Seed Brush Area:	<u>Mid-size</u>
12. Spike Density:	<u>Mid-dense</u>	26. Seed Brush Length:	<u>Mid-long</u>
13. Spike Shape:	<u>Fusiform</u>	27. Seed Color:	<u>Red</u>
14. Spike Awnedness:	<u>Awned</u>	28. Seed Relative Size:	<u>Med-large</u>

Unique physiological/biochemical traits: NA

Variants and Frequency: Tall plants occur at a rate of 1 plant in every 1,000.

6. Recognized classes of APB142 are breeder, foundation, registered, and certified. Arizona Plant Breeders will maintain the variety by head-row purification method to produce breeders' seed as needed. Royalty fees and licensing agreements are anticipated.
7. The anticipated date of first sale of seed of APB133 is fall of 2017.
8. Application for PVP is anticipated and descriptive data may be supplied to the PVP database.
9. Certified seed acreage may be published by AOSCA and individual seed certifying agencies.

Date this application was submitted: Jun 22, 2017

Date recommended by the VRB: Aug 24, 2017



# Triticale

## APB142 470,142 (Exp)

1. APB142 (470,142) is a spring triticale developed by Arizona Plant Breeders, Inc.
2. APB142 was selected for forage yield, quality, and it's awnless characteristic.
3. APB142 has been tested and proven successful in the triticale forage production regions of the San Joaquin Valley of Central California.
- 4 NA.

5. Identifying characteristics – insert the appropriate descriptive term from the Objective Description:

1. Ploidy:	<u>Hexaploid</u>	15. Awn Color:	<u>NA</u>
2. Growth Habit:	<u>Spring</u>	16. Glume Pubescence:	<u>Glabrous</u>
3. Photoperiod Reaction:	<u>Insensitive</u>	17. Glume Color:	<u>White</u>
4. Winterhardiness:	<u>Low</u>	18. Glume Length:	<u>Mid-long</u>
5. Maturity:	<u>Mid-Season</u>	19. Glume Width:	<u>Mid-wide</u>
6. Height:	<u>Mid-Tall</u>	20. Glume Shoulder Shape:	<u>Elevated</u>
7. Plant Color at Boot Stage:	<u>Blue-Green</u>	21. Glume Beak Shape:	<u>Acute</u>
8. Stem Anthocyanin:	<u>Absent</u>	22. Coleoptile Color:	<u>White</u>
9. Neck Hairiness:	<u>Slight</u>	23. Seed Shape:	<u>Elliptical</u>
10. Neck Shape:	<u>Straight</u>	24. Seed Smoothness:	<u>Slightly Wrinkled</u>
11. Flag Leaf at Boot:	<u>Twisted, Erect, Waxy Bloom Absent</u>	25. Seed Brush Area:	<u>Mid-size</u>
12. Spike Density:	<u>Mid-dense</u>	26. Seed Brush Length:	<u>Mid-long</u>
13. Spike Shape:	<u>Fusiform</u>	27. Seed Color:	<u>Red</u>
14. Spike Awnedness:	<u>Awnless</u>	28. Seed Relative Size:	<u>Medium</u>

Unique physiological/biochemical traits: NA

Variants and Frequency: Tall plants occur 1 in every 1,000 plants.

6. Recognized classes of APB142 are breeder, foundation, registered, and certified. Arizona Plant Breeders will maintain the variety by head-row purification method to produce breeders' seed as needed. Royalty fees and licensing agreements are anticipated.
7. The anticipated date of first sale of seed of APB142 is fall of 2017.
8. Application for a PVP is anticipated and descriptive data may be supplied to the PVP database.
9. Certified seed acreage may be published by AOSCA and individual seed certifying agencies.

Date this application was submitted: Jun 22, 2017

Date recommended by the VRB: Aug 24, 2017



# Triticale

## APB269 470,269 (Exp)

1. APB269 is a spring triticale developed by Arizona Plant Breeders, Inc.
2. APB269 was selected for forage yield and quality characteristics.
3. APB269 has been tested and proven successful in the triticale forage production regions of the San Joaquin Valley of Central California.
4. NA.

5. Identifying characteristics – insert the appropriate descriptive term from the Objective Description:

1. Ploidy:	<u>Hexaploid</u>	15. Awn Color:	<u>White</u>
2. Growth Habit:	<u>Spring</u>	16. Glume Pubescence:	<u>Glabrous</u>
3. Photoperiod Reaction:	<u>Insensitive</u>	17. Glume Color:	<u>White</u>
4. Winterhardiness:	<u>Low</u>	18. Glume Length:	<u>Long</u>
5. Maturity:	<u>Mid-Season</u>	19. Glume Width:	<u>Mid-wide</u>
6. Height:	<u>Mid-Tall</u>	20. Glume Shoulder Shape:	<u>Oblique</u>
7. Plant Color at Boot Stage:	<u>Blue-Green</u>	21. Glume Beak Shape:	<u>Acuminate</u>
8. Stem Anthocyanin:	<u>Absent</u>	22. Coleoptile Color:	<u>White</u>
9. Neck Hairiness:	<u>None</u>	23. Seed Shape:	<u>Elliptical</u>
10. Neck Shape:	<u>Wavy</u>	24. Seed Smoothness:	<u>Slightly Wrinkled</u>
11. Flag Leaf at Boot:	<u>Twisted, Recurved, Waxy Bloom Absent</u>	25. Seed Brush Area:	<u>Mid-size</u>
12. Spike Density:	<u>Mid-dense</u>	26. Seed Brush Length:	<u>Mid-long</u>
13. Spike Shape:	<u>Fusiform</u>	27. Seed Color:	<u>Red</u>
14. Spike Awnedness:	<u>Awned</u>	28. Seed Relative Size:	<u>Med-Large</u>

Unique physiological/biochemical traits: NA

Variants and Frequency: Tall plants occur at a rate of 1 in every 1,000 plants.

6. Recognized classes of APB269 are breeder, foundation, registered, and certified. Arizona Plant Breeders will maintain the variety by head-row purification method to produce breeders' seed as needed. Royalty fees and licensing agreements are anticipated.
7. The anticipated date of first sale of seed of APB269 is fall of 2017.
8. Application for a PVP is anticipated and descriptive data may be supplied to the PVP database.
9. Certified seed acreage may be published by AOSCA and individual seed certifying agencies.

Date this application was submitted: Jun 22, 2017

Date recommended by the VRB: Aug 24, 2017

